

APPENDIX III

TAB C

Expert Witness Report

Barbara Forrest, Ph.D.
Professor of Philosophy
Southeastern Louisiana University

April 1, 2005

I. Conclusions about the intelligent design creationist movement. My area of expertise is the nature and strategy of the intelligent design (ID) creationist movement. Based on the research I have done, I have concluded that its program is a fundamentally religious one. This conclusion is based primarily on ID leaders' and their supporters' views of it as stated in their own words. It is also based upon their total rejection of naturalism. Anti-naturalism is an integral part of ID. Its proponents reject not only philosophical naturalism (the metaphysical view that nothing exists beyond the natural world) but also the naturalistic methodology of science (the scientific procedural protocol of seeking only natural explanations of natural phenomena). ID's rejection of naturalism in any form logically entails its appeal to the only alternative, supernaturalism, as a putatively scientific explanation for natural phenomena. This makes ID a religious belief. In addition, my research reveals that ID is not science, but the newest variant of traditional American creationism. With only a few exceptions, it continues the usual complaints of creationists against the theory of evolution and comprises virtually all the elements of traditional creationism.

A. "The Wedge Strategy." In this report, I refer frequently to a document entitled "The Wedge Strategy" that outlines the ID movement's plan to promote mainstream acceptance of ID creationism and, subsequently, the teaching of ID in public school science classes.¹ The document states ID's religious mission: "Design theory promises to reverse the stifling dominance of the materialist worldview, and to replace it with a science consonant with Christian and theistic convictions." It also explains the short- and long-term goals of the Discovery Institute's creationist subsidiary, established in 1996 as the Center for the Renewal of Science and Culture (CRSC) and now called the Center for Science and Culture (CSC). The goals are to be executed in three phases: **I. Research, Writing, and Publication; II. Publicity and Opinion-making; and III. Cultural Confrontation and Renewal.** The document provides the ID movement's rationale for these goals. While this document is far from the only evidence of the religious commitments driving the ID movement, it stands out as the signature summary of the movement's nature and strategy.

Known informally as the "Wedge Document" since it was posted on the Internet in February 1999, the Discovery Institute did not acknowledge ownership of it for three years.² When

¹ See Center for the Renewal of Science and Culture, "The Wedge Strategy," on the Kansas Citizens for Science website at www.kcfs.org/Fliers_articlesAWedge.html. Accessed on March 31, 2005. This document formalizes the strategy being used by the Discovery Institute's Center for Science and Culture to promote ID, outlining the ID movement's goals over a twenty-year period.

² Chapter 2 of the book I co-authored with Paul R. Gross, *Creationism's Trojan Horse: The Wedge of Intelligent Design* (Oxford University Press, 2004) (see II. C. 2, below), explains my authentication of this

interviewed about the document in March 1999, CRSC Senior Fellow Jay Wesley Richards discussed the phases of the strategy without addressing the document's authenticity, calling it an "older, summary overview of the 'Wedge' program."³ In June 2002, Discovery Institute President Bruce Chapman paradoxically referred to it as a 1998 fundraising tool but disavowed the program it outlines: "I don't disagree with it," Chapman said, "but it's not our program."⁴ However, six months later, in December 2002, CSC Program Director Stephen C. Meyer finally admitted ownership of the document by stating that it "was stolen from our offices and placed on the Web without permission."⁵

"The Wedge Strategy" opens with a lament over what ID creationists perceive as an attack on "the proposition that human beings are created in the image of God . . . one of the bedrock principles on which Western civilization was built."⁶ Charles Darwin, Karl Marx, and Sigmund Freud are blamed for promoting a "materialistic conception of reality [that] eventually infected virtually every area of our culture, from politics and economics to literature and art." This charge is followed by a vow to reverse these "devastating" cultural consequences and reinstate a properly religious view of the natural world:

Discovery Institute's Center for the Renewal of Science and Culture *seeks nothing less than the overthrow of materialism and its cultural legacies.* Bringing together leading scholars from the natural sciences and those from the humanities and social sciences, the Center explores how new developments in biology, physics and cognitive science raise serious doubts about scientific materialism and *have re-opened the case for a broadly theistic understanding of nature,* (emphasis added)

The strategy is compared to a wood-splitting wedge, with "the predominant materialist science" portrayed as a "giant tree" that must be split at its "weakest points." The 1991 book *Darwin on Trial* by Phillip Johnson, originator of the strategy, is designated as the "thin end of the wedge." The "theory of intelligent design" is explicitly invoked as "a positive scientific alternative to materialistic scientific theories" that will broaden the wedge and increase the momentum of the movement's attack on materialism. Then the Wedge Strategy will take a sectarian turn, replacing materialism with "*a science consonant with Christian and theistic convictions.*" (emphasis

document, which the Discovery Institute acknowledged publicly only after my published work appeared. See the Discovery Institute's response to ch. 2 in "The 'Wedge Document': So What?," on its website at www.discovery.org/scripts/viewDB/filesDB/download.php?id=109. Accessed on March 29, 2005. Scans of original Wedge Document on file with Barbara Forrest.

³ See James Still, "Discovery Institute's 'Wedge Project' Circulates Online," *Secular Web*, March 12, 1999, at www.infidels.org/secular_web/feature/1999/wedge.html. Accessed on March 26, 2005.

⁴ See Mindy Cameron, "Theory of 'Intelligent Design' Isn't Ready for Natural Selection," *Seattle Times*, June 3, 2002, B4. Available at Lexis-Nexis.

⁵ See Chris Mooney, "Survival of the Slickest," *American Prospect*, December 2, 2002, at www.prospect.org/print/V13/I22/mooney-c.html. Accessed on March 26, 2005.

⁶ See "The Wedge Strategy."

added) Recognizing the need for support, the document affirms the strategy's Christian, evangelistic orientation:

Alongside a focus on influential opinion-makers, we also seek to build up a popular base of support among *our natural constituency, namely, Christians*. We will do this primarily through apologetics seminars. We intend these to *encourage and equip believers with new scientific evidences that support the faith*, as well as to "popularize" our ideas in the broader culture.⁷ (emphasis added)

The strategy includes "possible legal assistance" to counter resistance to the "integration of design theory into public school science curricula." The latter goal clearly confirms that the Discovery Institute wants ID to be taught in public schools.⁸

The Wedge Strategy includes twenty-year goals, one of which is "to see intelligent design theory permeate our religious, cultural, moral and political life." The more immediate, five-year (1998-2003) goals, which include promoting "the influence of design theory in spheres other than natural science," also include "spiritual & cultural renewal." Reflected in the center's original name, this goal requires making strategic inroads into the religious community:

- Mainline renewal movements begin to appropriate insights from design theory, and to repudiate theologies influenced by materialism
- Major Christian denomination(s) defend(s) traditional doctrine of creation & repudiate(s) Darwinism
- Seminaries increasingly recognize & repudiate naturalistic presuppositions⁹

⁷ Apologetics refers to the defense of Christianity from perceived attacks. See the definition below in this section.

⁸ CSC Associate Director John West denied this intent with respect to the Dover case: "Although we think discussion of intelligent design should not be prohibited, we don't think intelligent design should be required in public schools." See the December 14, 2004, Discovery Institute press release, "Discovery Calls Dover Evolution Policy Misguided, Calls for Its Withdrawal," at www.discovery.org/scripts/viewDB/index.php?command=view&program=CSC%20-%20Views%20and%20News&id=2341&callingPage=discoMainPage, Accessed on March 27, 2005. But see at 1V. H. in this report ID leader William Dembski's proposal to teach ID and recruit high school students to the Wedge program even in the absence of scientific research to support ID.

⁹ See information on "mainline renewal movements" at Religious Tolerance.org at www.religioustolerance.org/homj3m7.htm: "The ... Presbyterian Church (USA), the United Methodist Church, and other mainline denominations are quite heterogeneous. Their members reflect diverse points of view, from quite conservative Evangelicals to quite liberal beliefs. They contain renewal groups which are trying to return the denomination to an earlier state of doctrinal purity." Among some evangelical groups, renewal requires returning to what they perceive as America's original religious foundations. An example of such a group is the Center for Reclaiming America, established by D. James Kennedy, pastor of the Coral Ridge (Florida) Presbyterian Church. The center's program to "positively affect the culture and renew the vision of our Founding Fathers" includes "Promoting Creationism" and holding "Reclaiming America" conferences. See "About Us" at www.reclaimamerica.org/PAGES/AboutUs.asp. According to the *Christian Science Monitor*, a major theme of the 2005 conference was "taking back the schools, the media, the courts." See Jane Lampman, "For Evangelicals, a Bid to 'Reclaim America,'" *Christian Science Monitor*, March 16, 2005, at www.csmonitor.com/2005/0316/pl6s01-

The intent to construct a support base of Christian constituents by means of apologetics seminars warrants special mention here. Since, like earlier forms of creationism, ID creationists' objections to evolution are religious, they see it as a problem requiring redress through religious measures. Accordingly, as the above reference shows, they have incorporated an apologetics program into the Wedge Strategy. Given the meaning of "apologetics," the intent to cultivate ID supporters through such seminars is additional confirmation that ID's Wedge Strategy is not only a religious but a sectarian Christian program. "Apologetics" is defined in the *Oxford English Dictionary*: "*pi. or collect, sing. The defensive method of argument; often spec. The argumentative defence [sic] of Christianity.*" The Christian Research Institute, which has provided a great deal of publicity for the ID movement, defines apologetics this way: "Apologetics deals, first and foremost, with answering the outright denials of Christianity which are found in atheism and in other religions. But apologetics also deals first and foremost, with answering the outright denials of Christianity which are found primarily in the cults, as well as in some professing Christian groups within the Christian community itself. Thus, Christian apologetics must answer all challenges to the orthodox, biblical Christian faith—no matter who the challengers are."¹⁰

live.htm. In 1999, the year the Wedge Document became public, Phillip Johnson (a Presbyterian himself) made a speech entitled "How the Evolution Debate Can Be Won" at Kennedy's "Reclaiming America for Christ" conference. His speech invokes clearly the guiding themes of both the conference and the Wedge Strategy:

I have built an intellectual movement in the universities and churches that we call "The Wedge," which is devoted to scholarship and writing that furthers this program of *questioning the materialistic basis of science*. . . Now the way I see the logic of our [ID] movement going is like this. The first thing you understand is that the *Darwinian theory isn't true*. . . When you realize that, the next question that occurs to you is, "Well, where might you get the truth?" When I preach from the Bible, as I often do at churches and on Sundays, I don't start with Genesis. I start with John 1:1, "In the beginning was the Word." In the beginning was intelligence, purpose and wisdom. The Bible had that right and the *materialist scientists are deluding themselves*. . .

There are a lot of good things people can do. And the first one I'm going to say comes really straight out of the name of this conference--Reclaiming America For Christ. Throughout most of the 20th century the battle for Christianity has been a defensive battle; the initiative has been held by the atheists and agnostics--*the scientific materialist culture*. And the problem has been to hold on to some *Christian culture*. Christianity has done very well with the heart, but it has lost the intellectual world. Well, it's time to go back and reclaim it. . .

. . . And so we're the ones who stand for good science, objective reasoning, assumptions on the table, a high level of education, and freedom of conscience. . . That's what America stands for, and that's something we stand for, and that's something the Christian Church and the Christian Gospel stand for--the truth that makes you free. Let's recapture that, *while we're recapturing America*, (emphasis added)

See Johnson's speech at www.coralridge.org/specialdocs/evolutiondebate.asp. Accessed on March 28, 2005. (Johnson's citation of the verse from John's Gospel as ID's foundation is discussed later in this report.)

¹⁰ For the *Oxford English Dictionary* definition, see <http://dictionary.oxford.com/cgi/entry/S00103782>. Accessed on March 27, 2005. For the Christian Research Institute's definition, see "What Is Apologetics?" at www.equip.org/free/CP01.QQ.htm. Accessed on March 27, 2005. Virtually all creationist publications can be considered part of a Christian apologetics program. Dean Kenyon's co-author for *Of Pandas and People*, Percival Davis, co-authored a 1983 creationist book entitled *Case for Creation*. The back cover bears the word "Apologetics." Christian Leadership Ministries, a branch of Campus Crusade for Christ that has worked closely with the ID movement for over a decade, maintains an "Apologetics" page on its "Leadership University" website, where it provides virtual "offices" for ID proponents. This page, intended to assist Christians in their evangelistic efforts,

The CSC has established partnerships with other organizations in order to carry out the apologetics component of the Wedge Strategy. Among ID's most active supporters is the C. S. Lewis Society at Trinity College (formerly the Florida Bible Institute).¹¹ Run by ID proponent Thomas Woodward, the society promotes ID in its Christian apologetics program, which Woodward describes as "divided into two parts, General Apologetics and Intelligent Design."¹² Sponsors of its Apologetics.org website include the Foundation for Thought and Ethics (FTE), which holds the copyright to *Of Pandas and People*, and Access Research Network (ARN), a clearinghouse for ID materials. ^ Promoting intelligent design creationism is an integral part of Woodward's Center for University Ministries, which distributes the ID film *Unlocking the Mystery of Life* and other "key science and general apologetics resources." (See a reference to this film in IV. A.) FTE founder Jon Buell, Charles Thaxton, and ID proponent Robert Kaita (another CSC fellow), are on the Board of Advisers.¹⁴ ID creationism thus has its origins in the religious apologetics of its creationist forebears and continues this tradition today.

The Wedge Document provides more detail about the strategy itself and the activities already carried out at that point in its execution, but the selected excerpts highlight the religious nature of the program. The document also leaves no doubt that ID proponents view intelligent design as the essential element in their plan to return to what they believe is the religious foundation of American culture. Yet despite the fact that "The Wedge Strategy" is replete with explicit references to intelligent design, CSC Associate Director John West recently denied in the *York Daily Record* that the document has anything to do with ID;

But in the [Dover] lawsuit, the Discovery Institute is mentioned as an organization that has promoted replacing the "theory of evolution in public classrooms with so called 'science' that is 'consonant with Christian and theistic convictions.'" West said the piece to which the suit referred came from a Discovery Institute fund-raising letter that had nothing to do with intelligent design.¹⁵

lists links to numerous articles by ID proponents such as William Dembski and Phillip Johnson. See "Apologetics" at www.leaderu.com/menus/apologetics.html. Accessed on March 8, 2005.

¹¹ See Trinity College's "Frequently Asked Questions" at www.trinitycollege.edu/index.php?option=content&task=section&id=6&Itemid=65. Accessed on March 7, 2005.

¹² See Tom Woodward and Dan Davis, "Skeptics Welcome Station," at www.apologetics.org/welcome.html. Accessed on March 7, 2005. Woodward also wrote a recent book about ID, *Doubts About Darwin: A History of Intelligent Design* (Baker Books, 2003).

¹³ See "Questions and Answers: The Apologetics FAQ," at www.apologetics.org/questions.html. Accessed on March 7, 2005.

¹⁴ See "The Center for University Ministries" at www.apologetics.org/trinity.html. Accessed on March 7, 2005. The roles of Charles Thaxton and the Foundation for Thought and Ethics in the ID movement are discussed in IV. A. and IV. C, respectively.

¹⁵ See Lauri Lebo, "Some Allies Question Dover Board's Policy," *York Daily Record*, December 19, 2004. On file with Barbara Forrest.

My research shows that the document has everything to do with intelligent design and that the Discovery Institute has pursued the strategy aggressively.

II. Professional qualifications. My professional background and expertise are relevant to this case as follows:

A. I earned a Ph.D. in philosophy from Tulane University in 1988. In my dissertation, "Naturalism in Education: A Study of Sidney Hook," I examined the influence of Hook's naturalism on his views concerning education.¹⁶ Hook recommended the adoption of the naturalistic methodology of science as the model of critical inquiry throughout the educational process. He was especially concerned that methods of critical inquiry be implemented throughout public education, which is tasked with educating the broadest segment of American society. He defended secular democracy as protective of the freedom necessary to the process of inquiry. His defense of public education was an aspect of his broader defense of public policy that advances the interests of secular society rather than sectarian religion.

B. My study of Sidney Hook makes the issue of ID creationism and its proponents' efforts to influence the teaching of science in public schools a natural one in which to employ my philosophical training. My scholarship on the subject of ID therefore reflects my interest in using that training to address issues in which philosophical, scientific, and public policy issues intersect. The question of whether ID should be taught in public schools involves important philosophical and public policy issues.

1. The first issue is whether the policies governing public education and other public institutions should reflect the theistic beliefs of policymakers and/or their constituents. This issue may be subdivided into its philosophical and constitutional aspects. The philosophical aspect concerns the epistemological issue of whether supernatural explanations can justifiably be invoked as explanations for natural phenomena. With respect to the issue of ID creationism, this question narrows to whether the supernatural can function as a principle of scientific explanation, as ID proponents assert, as opposed to science's well-established naturalistic methodology in which only natural explanations are sought in order to explain natural phenomena. The constitutional aspect of the issue concerns whether public policy may be constructed in ways that require recognition of theistic belief as a foundation of that policy.
2. Another issue is whether there is any parity or functional equivalence between the current naturalistic methodology of science and the "theistic science" that ID proponents claim can supplant it.
3. Yet another issue concerns the pedagogical implications of teaching ID in public school science classes. Public school science education properly requires the presentation of science as it reflects well-established, mainstream scientific practice. ID proponents contend that "alternative theories" should also be presented to students in order to

¹⁶ Barbara Carroll Forrest, "Naturalism in Education: A Study of Sidney Hook" (Ph.D. diss., Tulane University, 1988).

facilitate their development of the ability to engage in "critical analysis." They also favor presenting evolutionary theory as scientifically controversial, a proposal to which they refer as "teaching the controversy." The absence of scientific research to support ID and of the claimed controversy within science mitigates against these proposals.

4. In addition to the pedagogical concerns stemming from teaching ID in public school science classes, its theistic foundation raises serious constitutional questions. Given the government's required neutrality in matters of religion, teaching ID poses a distinct threat to the constitutionally mandated separation of church and state.

C. **Scholarly publications.** I have written scholarly academic publications in which I establish the religious identity of ID and detail the ID movement's execution of its Wedge Strategy. I have also written scholarly publications in which I discuss the philosophical and public policy issues related to teaching ID in public school science classes.

1. Barbara Forrest, "The Wedge at Work: How Intelligent Design Creationism Is Wedging Its Way into the Cultural and Academic Mainstream," in *Intelligent Design Creationism and Its Critics: Philosophical, Theological, and Scientific Perspectives*, ed. Robert T. Pennock, MIT Press, 2001.¹⁷
2. Barbara Forrest and Paul R. Gross, *Creationism's Trojan Horse: The Wedge of Intelligent Design*, Oxford University Press, 2004.¹⁸

This book is cited in the Brief Amicus Curiae filed by Georgia Citizens for Integrity in Science Education (GCISE), November 15, 2004, with the following signatories: Colorado Citizens for Science, Kansas Citizens for Science, Michigan Citizens for Science, Nebraska Religious Coalition for Science Education, New Mexico Academy of Science, New Mexicans for Science and Reason, New Mexico Coalition for Excellence in Science and Math Education, and Texas Citizens for Science. The brief was filed in support of plaintiffs in *Jeffrey Michael Selman, et al, Plaintiffs, v. Cobb County School District, et al, Defendants*, United States District Court, Northern District of Georgia, Atlanta Division.¹⁹

3. Barbara Forrest, "A Defense of Naturalism as a Defense of Secularism," in *Sidney Hook Reconsidered*, ed. Matthew Cotter, Prometheus Books, 2004.²⁰

¹⁷ Available on the Talk Reason website at www.talkreason.org/articlesAVedge.cfm. Accessed on March 1, 2005.

¹⁸ See my website for this book at www.creationismstrojanhorse.com.

¹⁹ See the "Table of Authorities" in this brief at www.talkorigins.org/faqs/cobb/citizen_sforscience.html#authorities. Accessed on March 3, 2005.

²⁰ Available at www.creationismstrojanhorse.com/Defense_of_Naturalism.pdf.

4. Barbara Forrest, Review of *Darwinism, Design and Public Education*, by John Angus Campbell and Stephen C. Meyer, eds., *Integrative and Comparative Biology* 44:510-513 (2004).²¹
5. Steven Gey, Matthew Brauer, and Barbara Forrest, "Is It Science Yet? Intelligent Design Creationism and the Constitution," *Washington University Law Quarterly*, upcoming spring 2005.²²
6. Barbara Forrest and Paul R. Gross, "The Wedge of Intelligent Design: Retrograde Science, Schooling, and Society," in *Scientific Values and Civic Virtues*, ed. Noretta Koertge, Oxford University Press, forthcoming June 2005.²³
7. Barbara Forrest, "Teaching the Scientific and Philosophical Foundations of Evolution: Learning the Lay of the Religious and Political Land," forthcoming in a book compiled by the Biological Sciences Curriculum Study (BSCS), based on presentations by participants in the American Institute of Biological Sciences' Special Symposium, *Evolutionary Science and Society: Educating a New Generation*, annual meeting, National Association of Biology Teachers, November 2004.

The following are additional scholarly publications discussing issues relevant to ID.

8. Barbara Forrest, "Methodological Naturalism and Philosophical Naturalism: Clarifying the Connection," *Philo*, Fall-Winter 2000.²⁴
9. Barbara Forrest, "The Possibility of Meaning in Human Evolution," *Zygon*, December 2000.

D. Non-academic Publications. I have also written non-academic publications about the ID issue.

1. Barbara Forrest, "The Newest Evolution of Creationism," *Natural History* (April 2002): 80.²⁵

²¹ Available at www.fndarticles.com/Articles/mj_ga4054/is_2Q0412/ai_n9520516/print. Accessed on March 29, 2005.

²² Available as FSU [Florida State University] College of Law, Public Law Research Paper No. 125, Social Science Research Network, at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=590882. Accessed on March 29, 2005.

²³ See the web page for this book on the Oxford University Press website at www.oup.com/us/catalog/general/subject/Philosophy/Science/?view=usa&ci=Q195172248. Accessed on March 3, 2005.

²⁴ Available at www.creationismstojanhorse.com/ForTestPhilo.pdf. Accessed on March 3, 2005.

2. Barbara Forrest and Paul R. Gross, "Intelligent Design Has Distinctly Evolutionary Nature," *Science and Theology News*, December 2004.²⁶
3. Barbara Forrest and Glenn Branch, "Wedging Creationism into the Academy," *Academe*, American Association of University Professors, January-February 2005, 36.²⁷
4. Barbara Forrest, "Intelligent Design: Creationism's Trojan Horse, A Conversation with Barbara Forrest," *Church & State*, Americans United for Separation of Church and State, February 2005.²⁸

E. Other involvement with ID issues.

At the request of their authors, I reviewed the following Wexler article manuscript and the Pigliucci book manuscript.

1. Jay D. Wexler, "Darwin, Design, and Disestablishment: Teaching the Evolution Controversy in Public Schools," *Vanderbilt Law Review* 56 (2003): 751-855.
2. Massimo Pigliucci, *Denying Evolution: Creationism, Scientism, and the Nature of Science*, Sinauer Associates, 2002.

I have given numerous lectures and presentations about the ID issue, of which the following are representative:

3. "Neo-Creationism: Where's the Harm in That?" Evolution and God Conference, Case Western Reserve University, October 2004.²⁹
4. Special Symposium, *Evolutionary Science and Society: Educating a New Generation*, panel discussant at meeting of the American Institute of Biological Sciences and National Association of Biology Teachers, November 2004.³⁰

²⁵ Available at www.creationismstrojanhorse.com/NaturalHistory.pdf. Accessed on March 3, 2005.

²⁶ Available on the *Science and Theology News* website at www.stnews.org/archives/2004_december/books_authors^1204.html. Accessed on March 3, 2005.

²⁷ Available on the AAUP website at www.aaup.org/publications/Academe/2005/05if05ifforr.htm. Accessed on March 3, 2005.

²⁸ A longer version of this interview was published as a "Special Preview" on the Americans United website at www.au.org/site/PageServer?pagename=cs_200502_special. Accessed on March 3, 2005.

²⁹ See the conference web page at www.princehouse.homestead.com/schedule.html. Accessed on March 3, 2005.

³⁰ See the AIBS website at www.aibs.org/special-symposia/2004.html. Accessed on March 3, 2005.

5. "Creationism Lite," panel discussion at meeting of the American Anthropological Association, December 2004.
6. "Inside Creationism's Trojan Horse: A Closer Look at Intelligent Design," invited Darwin Day presentation at the University of Evansville, Evansville, Indiana, February 21, 2005.³¹

Based on my knowledge of the history of the ID movement's Wedge Strategy, the execution of that strategy, and the religious identity of ID, I have provided assistance to state and local pro-science organizations. I assisted Ravalli County Citizens for Science in Darby, Montana, during their efforts to reverse a policy adopted by their local school board supporting the teaching of ID in local high school science classes. I also assisted Ohio Citizens for Science during their efforts, first, to keep ID out of their state science standards and, second, to prevent the adoption of a creationist lesson plan based on a benchmark in the science standards. I have at various times helped other people working to protect either the teaching of science in their public schools (e.g., Burlington, WA) or their state science standards (e.g., Georgia).

Because of my involvement in and knowledge of the ID issue, I am also currently a member of the National Center for Science Education's Board of Directors. My activities promoting the separation of church and state resulted in my selection as a member of the National Advisory Council for Americans United for Separation of Church and State.

III. Methodology used in research and publication on ID.

A. Research goal. In my publications on the issue of ID creationism, my goal has been to present a comprehensive explanation, based on empirical research, of the nature of the ID movement and its "Wedge Strategy" for promoting ID both in public schools and, more comprehensively, in American culture. This explanation has included identifying ID as an extension of traditional creationism by showing the continuity between ID and earlier forms of creationism such as "scientific creationism" and "progressive creationism." It has further included establishing the identity of ID as a fundamentally religious movement that employs political means to advance its religious ends.³²

B. Guiding research principles. The principle guiding my research and publication is the use of primary source data as much as possible; the best data are statements made by the leaders of the ID movement at the Discovery Institute's Center for Science and Culture, who, in reference to their "Wedge Strategy," refer to themselves collectively as "the Wedge." I therefore rely chiefly upon the Wedge leaders' own descriptions of their movement and of its motives and goals, using direct quotes by leading ID proponents at every opportunity. Statements by the ID

31 See "UE Darwin Day to Discuss Intelligent Design," in "News and Events," February 15, 2005, University of Evansville website, at www.evansville.edu/aboutus/news.asp?ArticleID=506. Accessed on March 29, 2005.

32 See ch. 9 of *Creationism's Trojan Horse*, which presents the evidence for both of these aspects of the ID movement. See also Gey, Brauer, and Forrest, "Is It Science Yet? Intelligent Design Creationism and the Constitution" at note 22. See also Forrest and Gross, "The Wedge of Intelligent Design: Retrograde Science, Schooling, and Society" (forthcoming June 2005) at note 23.

movement's leaders are the best evidence of the nature of ID, the Wedge Strategy's goals, and ID proponents' activities to execute the strategy. Wedge leaders have made numerous statements, both written and verbal, revealing the religious essence of ID, and I have made extensive use of such statements. Since no one in the ID movement has produced original scientific research in its support, Wedge leaders' public statements and publications constitute the substance of ID. I also use statements by their allies and supporters.

Another principle guiding my research is to analyze ID proponents' terminology and the conceptual framework within which they explain both ID and their strategy. For example, I have documented the ways in which ID proponents have strategically modified their terminology over the last few years; for example, they often substitute the term "objective origins" for "intelligent design." I have also analyzed the concepts that ID proponents employ in their promotion of ID and their defense of its putative scientific legitimacy. Their rejection of scientific naturalism and promotion of ID as a "non-natural" alternative to evolutionary theory logically entails their promotion of supernaturalism, which is the only alternative to naturalism.

C. Primary sources for ID proponents' statements about the nature of ID, their strategy and goals, and their execution of the strategy. Since I rely primarily upon Wedge leaders' own statements as much as possible, my primary sources of ID proponents' statements about the nature of ID, their strategy and goals, and their execution of the strategy are their own writings, publicity materials, and other primary information sources. ID proponents have written numerous books describing both ID and their strategy. I have used documents such as articles by William Dembski, which he posts on his website.³³ In order to document the absence of articles using ID as a biological theory in peer-reviewed, scientific journals, I searched scientific databases such as Medline, Zoological Record, etc.

I also obtain data from the websites of the Discovery Institute (DI) and its creationist subsidiary, the Center for Science and Culture (CSC), William Dembski's International Society for Complexity, Information, and Design (ISCID), and auxiliary ID organizations such as Access Research Network (ARN) and the Intelligent Design Network (IDnet), both of which work very closely with the CSC. ID proponents use these websites to post press releases, commentaries, letters, articles, policy statements, etc. These are often useful in following the ID movement's political activities. For example, the Discovery Institute posted a May 8, 2000, press release announcing its congressional briefing for U.S. senators, congressmen, and staffers.³⁴ DI has also posted a great deal of information about the "Santorum amendment," a sense of the Senate

³³ See William A. Dembski, "Design Inference Website," at www.designinference.com. Accessed on March 29, 2005.

³⁴ On file with Barbara Forrest. DI news releases are not retained on its website. This one is archived in Lexis-Nexis (load date May 8, 2000).

resolution that Phillip Johnson wrote and that Sen. Rick Santorum attempted to insert into the No Child Left Behind Act in 2001.³⁵

Wedge members give numerous lectures and speeches, which are often available as audio files. They make frequent radio appearances, and the programs are often accessible via the Internet. I have used both recordings and transcripts of speeches and radio appearances by Wedge members. They are often interviewed by magazines that post the interviews on the Internet. Wedge members have both organized and participated in numerous ID conferences, which are publicized on the Internet, often on special web pages created for these conferences. I have used audiotapes and transcripts of ID leaders' conference presentations, as well as the published conference proceedings when those are available. Other relevant sources of statements by ID proponents include media coverage in newspapers and magazines, interviews with ID leaders on radio programs and in magazines, audio recordings, and videotapes featuring ID leaders and their supporters.

Among the most important sources of primary data are those which show the ID movement's religious alliances and associations. For example, all of the CSC's major funding sources are religious. The *Discovery Institute Journal*, formerly published on the DI website, announced the sources and amounts of funding for its Center for the Renewal of Science and Culture.³⁶ In addition, Wedge members have been interviewed by and have appeared with high-profile religious figures such as James Dobson of Focus on the Family and D. James Kennedy of Coral Ridge Ministries.³⁷ They are frequent speakers at churches and religious meetings. I have obtained evidence of these associations from radio and magazine interviews as well as the websites of the ID movement's religious allies. Focus on the Family's website sells ID materials such as videotapes, and FOF co-published the ID videotape *Unlocking the Mystery of Life*. This tape was also promoted as an "evangelistic tool" by the U. S. Center for World Mission.³⁸

D. My secondary sources of information about ID's religious goals and creationist identity are publications and statements by other creationists. Such information is available from the websites of the ID movement's religious associates and allies such as Focus on the Family. Focus on the Family, for example, has published pro-ID articles in its *Citizen* magazine. Churches and other groups that sponsor lectures and conferences featuring Wedge members frequently post this information on the Internet. An example is information posted by the

³⁵ See "Key Resources for Parents and School Board Members" on the Discovery Institute's Center for Science and Culture website at www.discovery.org/csc/. See hyperlink to "Santorum Language in the No Child Left Behind Act Conference Report" on this page. Accessed on March 3, 2005.

³⁶ See *Creationism's Trojan Horse*, pp. 148-50, 267.

³⁷ See *Creationism's Trojan Horse*, ch. 9.

³⁸ See Focus on the Family's promotional web page for the videotape at www.family.org/resources/itcmpg.cfm?itemid=3042. See the U. S. Center for World Mission's promotion for in their *Mission Frontiers* magazine at www.cesame-cfm.org/announcement/Unlocking_Mystery.pdf. Accessed on March 29, 2005.

Rivendell Institute in New Haven, CT, regarding a November 2000 ID conference at Yale University. A conference brochure was available on the website.³⁹

IV. Basis for conclusions (see I above).

A. Historical background on the development of ID creationism. The legal challenges to the teaching of evolution began with the 1925 Scopes trial. Since then, the courts have issued at least nine major rulings relating to the religiously based efforts of creationists to curtail the teaching of evolution: *Epperson v. Arkansas*, 1968; *Segraves v. State of California*, 1981; *McLean v. Arkansas Board of Education*, 1982; *Edwards v. Aguillard*, 1987; *Webster v. New Lenox School District*, 1990; *Peloza v. Capistrano School District*, 1994; *Freiler v. Tangipahoa Parish Board of Education*, 1997; *Rodney LeVake v. Independent School District 656, et al*; and *Selman et al. v. Cobb County School District et al*, 2005.⁴⁰

These challenges all stemmed from religious objections by creationists to the teaching of evolution and have been consistently unsuccessful in light of creationism's essentially religious nature. A popular creationist book written by P. William Davis, the co-author of *Of Pandas and People*, stated almost forty years ago that "it is an illusion to suppose that the problems which evolutionary doctrine raises for Christians are well under control, ... To underestimate it and its impact is dangerous."⁴¹ ID creationists still share this estimation. Charging in the Wedge Document that "the proposition that human beings are created in the image of God" came under "wholesale attack" by "thinkers such as Charles Darwin," they conclude that "The cultural consequences of this triumph of materialism were devastating." They vow to seek "nothing less than the overthrow of materialism and its cultural legacies."⁴²

Although the Wedge Strategy (see I. A.) was developed in the wake of *Edwards*, ID creationism itself predates *Edwards*.⁴³ It is a direct outgrowth of the progressive creationism (PC) of the early 1980s. Progressive creationists accept scientific data that establish the age of the earth as several billion years, but they believe that God created all living things and periodically

³⁹ On file with Barbara Forrest.

⁴⁰ See Molleen Matsumura, *Eight Major Court Decisions Against Teaching Creationism as Science*, National Center for Science Education, February 2001, at www.ncseweb.org/resources/articles/3747_8_major_court_decisions_against_2_15_2001.asp. See *Selman et al. v. Cobb County School District et al.*, at www.gand.uscourts.gov/documents/02cv2325ord.pdf. Accessed on March 29, 2005.

⁴¹ See Wayne Frair and P. William Davis, *The Case for Creation* (Chicago: Moody Press, 1967), 7. P. William Davis is Percival Davis, as pointed out later in this report.

⁴² See "The Wedge Strategy."

⁴³ See Eugenie C. Scott, *Evolution vs. Creationism: An Introduction* (Westport, CT: Greenwood Press, 2004), 116; "Intelligent Design" (ID) refers to a movement that began a few years before the *Edwards* decision and solidified in the few years after it."

intervenes in the workings of nature.⁴⁴ In a 1984 article entitled "The Trustworthiness of Scripture in Areas Relating to Natural Science," ID proponent and CSC fellow Walter Bradley, a progressive creationist, asserts that God works through both natural processes and miraculous interventions in the natural process. Stressing the need to respect biblical constraints in the interpretation of scientific data, Bradley frames his argument within the requirements of apologetics:

The progressive creationist sees God working . . . through a combination of miracle plus [natural] process. . . . The goal is to first define the latitude of permissible interpretation of the biblical account of origins. Then God's revelation of his world as perceived through the eyes of science will be used to identify the best possible interpretation of origins within the previously prescribed boundary. This methodology allows the authoritative position of Scripture to be maintained while taking advantage of insights from scientific studies to supplement our understanding where the Genesis 1 account is ambiguous.⁴⁵

Bradley's remark about the ambiguity of the Genesis creation account is a reference primarily to the creationist debate about the age of the earth. Bradley, like other progressive creationists, accepts the scientific data produced by the modern earth sciences. Characterized by its acceptance of the earth's age as several billion years, PC is therefore a form of "old-earth" creationism (OEC). Although the ID movement includes "young-earth" creationists such as Nancy Pearcey and Paul Nelson, most ID creationists are old-earth creationists.⁴⁶ However, ID's explicit emphasis on "intelligent design" as a putatively scientific explanation for natural phenomena can be traced to young-earth creationism (YEC). In 1967, YECs Wayne Frair and P. [Percival] William Davis attributed phylogenetic similarities to "a common creative plan or design according to which basic organisms were created."⁴⁷ In 1978, YEC Richard Bliss, explaining "creative design," wrote that "the designer for [all life and life processes]" was "the God of creation."⁴⁸ By 1988, Bliss was using the term "intelligent design," asserting that "while

⁴⁴ See Scott's discussion of PC in *Evolution vs. Creationism*, 62.

⁴⁵ See Walter L. Bradley and Roger Olsen, "The Trustworthiness of Scripture in Areas Relating to Natural Science," at www.origins.org/articles/bradley_trustworthiness.htm. Accessed on March 7, 2005. Bradley is listed as one of the "Critical Reviewers" in the 1989 and 1993 editions of *Of Pandas and People*. See p. iii of both editions.

⁴⁶ For information on ID's continuity with progressive creationism, see Forrest and Gross, *Creationism's Trojan Horse*, pp. 276-280. See also Eugenie C. Scott, *Evolution vs. Creationism* (Greenwood Press, 2004), pp. 61-64.

⁴⁷ See Wayne Frair and P. William Davis, *The Case for Creation: An Evaluation of Modern Evolutionary Thought from a Biblical Perspective* (Chicago: Moody Press, 1967), 24. This book is an earlier edition of *A Case for Creation*, the 1983 book Frair and Davis co-authored (see note 10).

⁴⁸ See Richard Bliss, *Origins: Two Models: Evolution [and] Creation* (San Diego: Creation-Life Publishers, 1978), 3.

U.S. Supreme Court ruled against teaching creation science in public schools in *Edwards v. Aguillard*. Also in 1987, Berkeley law professor Phillip Johnson decided to begin his anti-evolution effort after his religious conversion; in the early 1990s, with a group of supporters, he developed ID's "Wedge Strategy" to defeat evolution.⁵³ Johnson says that the Wedge movement began in 1992 at a conference at Southern Methodist University.⁵⁴ In 1993, he held another conference entitled "The Darwinian Paradigm: Problems and Prospect" in Pajaro Dunes, California, which Kenyon attended.⁵⁵ By 1995, according to Johnson, Kenyon had become a "proponent of 'intelligent design' as an explanation for life's inherent complexity, which is to say he argued, without necessarily endorsing a literal reading of the Genesis account, that a preexisting supernatural intelligence probably had to have been involved in some way."⁵⁶ Kenyon also has a major role in the 2004 ID film, *Unlocking the Mystery of Life*.⁵⁷

In 1996, when the Discovery Institute, a Seattle think tank, established the Center for the Renewal of Science and Culture (CRSC) to promote ID through execution of the Wedge Strategy, Johnson became (and remains) its advisor; Kenyon was among its first fellows, an association he still maintains, as does Thaxton.⁵⁸

B. Post-Edwards promotion of ID creationism. Although *Edwards v. Aguillard* outlawed creationism in public school science classes, Phillip Johnson and his Wedge associates have promoted ID aggressively. But since this effort began in the immediate wake of *Edwards*, the Wedge had to adjust its strategy accordingly. Paul Nelson, a founding Wedge member, explains

Henry Morris's *The Genesis Flood* (1961), and followed that later with a section for Wilder-Smith's *The Creation of Life* (1970). He also affirms in the 1982 foreword that he no longer accepted the pro-evolution arguments he made in his own book, *Biochemical Predestination* (1969). See Dean Kenyon, foreword to *What Is Creation Science?* by Henry M. Morris and Gary Parker (San Diego, CA: Creation-Life Publishers, 1982). Writing in a YEC publication, George F. Howe refers to Kenyon as "an example of an evolutionist who . . . converted to creationism." See "Origins and Education: A Primer," *Creation Matters* (July/August 1999), 6, at www.creationresearch.org/creation_matters/99/crm9907.html#Origins_and_Education. Accessed on March 7, 2005.

⁵³ See Forrest and Gross, *Creationism's Trojan Horse*, ch. 1.

⁵⁴ See Phillip E. Johnson, "The Wedge: Breaking the Modernist Monopoly on Science," *Touchstone* (July/August 1999), 18. The conference was entitled "Darwinism: Scientific Inference or Philosophical Preference?" See the roster of attendees and presentations at www.leaderu.com/orgs/le/darwinism/. Accessed on March 8, 2005.

⁵⁵ Walter Bradley also attended. For a partial roster of attendees at the Pajaro Dunes conference, see Paul Nelson and Jonathan Wells, "Is Common Descent an Axiom of Biology?" at www.leaderu.com/orgs/am/nelson/pn_darwinianparadigm061593.htm. Accessed on March 7, 2005.

⁵⁶ See Phillip E. Johnson, *Reason in the Balance: The Case Against Naturalism in Science, Law, and Education* (Downers Grove, IL: InterVarsity Press, 1995), 29.

⁵⁷ See a promotion for the film listing Kenyon as a participant at www.arn.org/arnproducts/videocs/v026.htm. Accessed on March 7, 2005.

⁵⁸ See the 1996-97 roster of fellows at <http://web.archive.org/web/19961102121141/www.discovery.org/assocfellows.html>. See the current roster at www.discovery.org/csc/fellows.php. Accessed on March 7, 2005.

how this was done. In *Christian Research Journal* (2002), Nelson points out that "the demographics of dissent from neo-Darwinian evolution have changed dramatically." Affirming that "creationists have sought throughout the twentieth century ... an open-ended debate about the truth of Darwinian evolution," he announces that the debate "has now arrived in the emergence of the 'intelligent design' (ID) movement."⁵⁹ Noting that "one can no longer accurately characterize dissenters from Darwinian evolution strictly as 'young-earth' creationists," Nelson recounts "the history of this shift," giving Johnson most of the credit for bringing it about. He also advises his readers that although "life in the 'big tent' of the intelligent design community certainly requires a period of acclimation," Christians, particularly "traditional creationists," should "welcome their new ID surroundings." (The "big tent" refers to Johnson's effort to build a coalition of YECs and ID proponents in order to promote ID. Wedge member Nancy Pearcey calls it "the 'big tent' for the evangelical world."⁶⁰)

Nelson pinpoints *Edwards* as a pivotal ruling for creationists: "The year 1987 marks a noteworthy turning point in the American debate over the science and philosophy of origins. In that year, a long cultural battle that had begun more than a quarter century earlier (with [YECs] Henry Morris and John Whitcomb's classic *The Genesis Flood* in 1961) appeared to many onlookers to have come decisively to an end when the *Edwards v. Aguillard* decision of the U.S. Supreme Court declared 'creation-science' to be a religious belief." Nelson recalls that, at the time, *Edwards* "seemed to shut the door permanently on creationism," and "the 'two-model' approach to the origins controversy was now dead."⁶¹ But although "*Edwards* had seemingly ended the public debate over origins," the issue was not dead: "A revolution from an unexpected quarter ... was about to occur."⁶² Johnson revived the creationism issue by shifting the focus of the debate.

According to Nelson, the books Johnson read after his conversion convinced him that "the ostensible issues of *Edwards v. Aguillard* were not the real issues" and that "the creationists in Louisiana never had a chance" because of "the way 'science' was defined."⁶³ Moreover, reading

⁵⁹ See Paul Nelson, "Life in the Big Tent: Traditional Creationism and the Intelligent Design Community," *Christian Research Journal* 24 (2002), Christian Research Institute, at www.equip.org/free/DL303.htm. Accessed on March 8, 2005.

⁶⁰ Pearcey, "Opening the 'Big Tent' in Science."

⁶¹ See Nelson, "Life in the Big Tent." See also historian of science John Lynch's "Timeline" which lists "some of the major events in the interaction between evolutionary and creationist worldviews" at <http://web.archive.org/web/20030422152348/http://jmlynch.myftp.org/classes/origins/summer/timeline.php>. Accessed on March 7, 2005. Lynch points out that *Edwards v. Aguillard* (1987) "probably marks the end of Young Earth Creationism as a potent force."

⁶² See Nelson, "Life in the Big Tent."

⁶³ Nelson says that while on sabbatical in England in 1987, Johnson read Richard Dawkins' *The Blind Watchmaker*, considered a classic popular explanation of evolutionary theory, and Michael Denton's *Evolution: A Theory in Crisis*, another book that Dembski cites as one with which the ID movement begins. (See Dembski, "The Intelligent Design Movement" at note 50 and accompanying text.) Geneticist Philip T. Spieth places Denton's book

the *amicus* briefs filed in *Edwards*, including the National Academy of Sciences brief, Johnson decided that scientists' definition of science as naturalistic meant that "advocates of supernatural creation may neither argue for their own position nor dispute the claims of the scientific establishment."⁶⁴ (Johnson's objection to defining science as naturalistic reveals his preference for a definition that either explicitly or implicitly includes the supernatural.) Johnson decided that the real issue was neither "the literal truth of Genesis nor the merits of 'creation science,'" but rather "whether there could be, even in principle, any evidence against Darwinian evolution or in favor of design by an intelligence"⁶⁵ (emphasis in original). In short, according to Nelson, Johnson simply rejected the accepted definition of science: "Definitions of science, [Johnson] argued, could be contrived to exclude any conclusion we dislike or to include any we favor."⁶⁶

Johnson subsequently made this argument in *Darwin on Trial* (1991), which "provided the philosophical core for a research community that had already begun to form in the 1980s around such books as [Charles Thaxton's] *The Mystery of Life's Origin*." (This book, as noted above, argues for "special creation.") His Pajaro Dunes conference, which included YECs, emphasized that the "admission price" to his new movement was "minimal: one need only allow for the possibility of design." (emphasis in original) Johnson calls his minimalist creationism "mere creation," which Wedge member and YEC John Mark Reynolds calls "the counterpart in science to C.S. Lewis's notion of 'mere Christianity': the common ground uniting all orthodox Christians."⁶⁷ This is a central aspect of how the Wedge has promoted ID in the *post-Edwards* era.

C. Publication of *Of Pandas and People*. In fall 1981, the creationist newsletter *Origins Research* carried a short story announcing that "A high school biology textbook is in the planning stages that will be sensitively written to 'present both evolution and creation while limiting discussion to scientific data.'"⁶⁸ The announcement is clearly a reference to the book

in the "creation science" genre." See Spicth's review in the June 1987 issue of *Zygon* at www.ncseweb.org/resources/articles/2245_review_of_michael_denton39s_6_1_1987.asp. Accessed on March 8, 2005.

⁶⁴ See the National Academy of Sciences' definition of science in its *amicus* brief at www.soc.utoronto.ca/~samaha/cases/edwards_v_aguillard_NAC.html. Accessed on March 8, 2005.

⁶⁵ See Nelson, "Life in the Big Tent."

⁶⁶ See Johnson's elaboration on his objections to the naturalistic definition of science in "Evolution as Dogma: The Establishment of Naturalism," *Foundation for Thought and Ethics* (1990), at www.am.org/docs/johnson/pjdognm1.htm. Accessed on March 9, 2005. Michael Behe, a biochemist and founding Wedge member, clearly favors a definition of science that permits supernatural explanations: "The philosophical argument (made by some theists) that science should avoid theories which smack of the supernatural is an artificial restriction on science. Their fear that supernatural explanation would overwhelm science is unfounded." See Michael J. Behe, *Darwin's Black Box* (New York: Simon and Schuster, 1996), 251.

⁶⁷ See Pearcey, "Opening the 'Big Tent' in Science."

⁶⁸ "Unbiased Biology Textbook Planned," *Origins Research* (Fall 1981). On file with the National Center for Science Education. This was the newsletter of a student creationist group, Students for Origins Research, and is the ancestor of the ID publication *Origins and Design*. See the OR archive at Access Research Network at

first published in 1989 as *Of Pandas and People*, the ID movement's first (and only) secondary school textbook. Creationist Charles Thaxton, whose work William Dembski credits as foundational to the ID movement (see IV. A.), would be the science advisor. Thaxton's place of contact was the Foundation for Thought and Ethics, which holds the copyright to *Pandas* and to Thaxton's 1984 book, *The Mystery of Life's Origin*. The author would be "a teaching biologist with two McGraw-Hill books in print," a reference to P. William Davis, co-author of two earlier YEC books (see notes 10 and 47). He co-authored *Pandas* as Percival Davis.⁶⁹ In a 1994 newspaper article about *Pandas*, Davis admitted his religious motives for writing it: "Of course my motives were religious. There's no question about it."⁷⁰

Davis's *Pandas* co-author was Dean H. Kenyon, the scientific creationist who became an ID proponent following the *Edwards* decision (see IV. A. at n. 52 and accompanying text). As stated above, Kenyon's view was that there were only two alternatives: creation-science and evolution. The fact that *Pandas*, a book promoting ID, was in the works prior to Kenyon's submission of his 1986 affidavit and was published shortly thereafter suggests that for Kenyon, there is no meaningful distinction between creation-science and ID. A 1994 review of *Pandas* in the YEC *Creation Research Society Quarterly* by Wayne Frair, Davis's co-author on two earlier YEC books, certainly makes no distinction:

Two main prongs of the creationist movement are (1) emphasis upon a supernatural creator GOD and (2) the concept of separate unrelated created types (kinds) of plants and animals. The *Pandas* book strongly supports the latter with good science. With its stress upon intelligent design using good science, the book points in the direction of the former in a way that is acceptable in public schools and in a religiously neutral scientific community.⁷¹

Indeed, *Pandas* contains unmistakable similarities not only to Kenyon's earlier creationist views, spelled out in his 1986 affidavit of support for the defendants in *Aguillard v. Edwards* (1986), but also to other earlier creationist publications. There are numerous threads of continuity connecting the earlier creationist work, Kenyon's views, *Pandas*, and other ID publications; this continuity includes both tactical and content similarities. Examples include the following (with emphasis added):

1. Creationists commonly claim for tactical reasons that support for their position is increasing.

www.am.org/orpages/or.htm. See also the Fall 1981 table of contents at www.am.org/orpages/ori/index.htm#4.2. See also Forrest and Gross, *Creationism's Trojan Horse*, 11d-11, 347 n104.

⁶⁹ See John A. Thomas, "The Foundation for Thought and Ethics," *NCSE Reports* (July-August, 1990), 18-19, at www.ncseweb.org/resources/articles/77&1_36_thomas1990_the_founda_11_23_2004.asp. Accessed on March 10, 2005.

⁷⁰ See Erik Larson, "Darwinian Struggle," *Wall Street Journal*, November 14, 1994, A1. Available through ProQuest.

⁷¹ See Wayne Frair, review of *Of Pandas and People*, by Percival Davis and Dean H. Kenyon, *Creation Research Society Quarterly* 31 (1994): 61.

Institute for Creation Research (YEC) (1980): "Today there are thousands of scientists who are creationists and who repudiate any form of evolution in their analysis and use of scientific data. Creationist scientists can now be found in literally every discipline of science and *their numbers are increasing rapidly.*"⁷²

Kenyon affidavit (1986): "Although students generally hear only one side on the origins question, *increasing numbers of scientists* are now abandoning evolution for a new scientific version of creationism. Creationist scientists now number in the hundreds, possibly in the thousands, in the States and other countries."⁷³

Discovery Institute's Center for Science and Culture, "Top Questions [on ID]" (2004): "Since Discovery Institute first published its statement of dissent from Darwin in 2001, more than 300 scientists have courageously stepped forward and signed onto a *growing list of scientists* of all disciplines voicing their skepticism over the central tenets of Darwin's theory of evolution."⁷⁴

***Of Pandas and People* (1993):** " *Pandas* gives students a much-needed opportunity to explore the evidence and arguments that have caused some scientists to doubt contemporary Darwinism, . . . *Pandas* helps students understand the case for intelligent design. Following a *growing number of scientists* and philosophers, the authors argue that life not only *appears* to have been intelligently designed but that it actually was."⁷⁵

2. Creationists reject natural explanations of such things as the origin of life.

Henry Morris, ed., *Scientific Creationism* (1974) (YEC): "Creationists believe that this continued emphasis on the naturalistic or artificial production of living organisms is highly misleading. *None of these phenomena would ever occur under natural conditions.* . . . There is no [sic] slightest *scientific* evidence that life can come from non-life. The creation model emphasizes the unique origin of life, at the creative word of a *living* Creator."⁷⁶

Kenyon affidavit (1986): "Until such evidence [that life on earth could have begun spontaneously by purely chemical and physical means] is forthcoming, *one certainly*

⁷² See "The ICR Scientists," *Impact* (August 1980), Institute for Creation Research, at www.icr.org/pubs/jmp/jmp-086.htm. Accessed on March 14 2005.

⁷³ See Kenyon, "Affidavit," 61-62.

⁷⁴ See Center for Science and Culture, "Top Questions," at www.discovery.org/csc/topQuestions.plp. Accessed on March 14, 2005.

⁷⁵ See Mark D. Hartwig and Stephen C. Meyer, "A Note to Teachers," in Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas, TX: Haughton Publishing Co., 1993), 157.

⁷⁶ See Henry M. Morris, ed., *Scientific Creationism* (Public School Edition), (San Diego, CA: Creation-Life Publishers, 1974), 50-51.

cannot claim that the possibility of a naturalistic origin of life has been demonstrated."⁷⁷

ID proponent William Dembski, *Intelligent Design: The Bridge Between Science and Theology* (1999): "Indeed the following problems have proven *utterly intractable not only for the mutation-selection mechanism but also for any other undirected natural process proposed to date: the origin of life, the origin of the genetic code, the origin of multicellular life,*..."⁷⁸

Of Pandas and People (1993): "Many who accept intelligent design as the best theory of life origins also believe that observations show *natural processes are inadequate to account for the appearance of major types of living things.*"⁷⁹

3. Creationists assert that life appears abruptly, without biological precursors, in the geological record, implying divine intervention in the production of these life forms.

Henry Morris, *Scientific Creationism* (1974): "All orders and families (as well as kingdoms, phyla and classes) *appear suddenly in the fossil record*, with no indication of transitional forms from earlier types."⁸⁰

Kenyon affidavit (1986): "Creation-science means origin through *abrupt appearance in complex form,*... [M]ost fossil forms *appear abruptly* in the record, remain essentially unchanged for millions of years ... and then abruptly disappear... This extraordinary situation directly supports creation-science."⁸¹

Stephen C. Meyer, P. [Paul] A. Nelson, and Paul Chien, "The Cambrian Explosion: Biology's Big Bang" (2001): "First, as the name implies, the fossils of the Cambrian explosion *appear suddenly or abruptly* within a very brief period of geologic time... Finally the theory of intelligent design also explains both the *sudden appearance* of the animal body plans in the Cambrian and the absence of ancestral precursors in the pre-Cambrian."⁸²

⁷⁷ See Kenyon, "Affidavit," 68.

⁷⁸ See William A. Dembski, *Intelligent Design: The Bridge Between Science and Theology* (Downers Grove, IL: InterVarsity Press, 1999), 113.

⁷⁹ See Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas, TX: Haughton Publishing Co., 1993), 41-42.

⁸⁰ See Morris, *Scientific Creationism*, 79.

⁸¹ See Kenyon, "Affidavit," 61, 64.

⁸² See Stephen C. Meyer, P. A. Nelson, and Paul Chien, "The Cambrian Explosion; Biology's Big Bang," 2, 42, at www.discovery.org/articleFiles/PDFs/Cambrian.pdf. Accessed on March 29, 2005. This is an ID publication.

Of Pandas and People (1993): "There is a virtual 'explosion' of life forms recorded in the rocks at the beginning of the Cambrian [period]. Any theory of the origin and development of life must explain how such a dramatic range of body plans made the *early, abrupt appearance* they did."⁸³

Pandas actually defines intelligent design as "*abrupt appearance*": "Darwinists object to the view of intelligent design because it does not give a natural cause explanation of how the various forms of life started in the first place. *Intelligent design means that various forms of life began abruptly through an intelligent agency*, with their distinctive features already intact—fish with fins and scales, birds with feathers, beaks, and wings, etc."⁸⁴

These are only a few examples of the uninterrupted line of descent from young-earth creationism, to Kenyon's creation-science, and finally to ID as represented in *Pandas* and other writings by ID proponents.

William Dembski calls *Pandas* a "transitional text" that "began examining what a design-theoretic alternative to evolutionary theory would look like."⁸⁵ Wedge member and young-earth-creationist Nancy Pearcey, who wrote the "Overview" in *Pandas*, credits the book for helping to fuel the "resurgence of controversies in education."⁸⁶ Pearcey's observation reflects *Pandas'* continuation of the creationist tradition of writing textbooks that challenge the primacy of evolutionary theory. Correspondingly, *Pandas* bears distinct evidence of its creationist ancestry. For example, YEC Richard Bliss, in *Origins: Creation or Evolution*, refers to a "Master Designer": "Creationists predict that the further scientists explore the more their studies will reveal symmetry, order and interdependence . . . evidence for a Master Designer."⁸⁷ *Pandas*, in both the 1989 and 1993 editions, refers to a "master intellect": "This parallel [between the structure of informational molecules (DNA, protein) and our universal experience that such sequences are the result of intelligent causes] strongly suggests that life itself owes its origin to a

Nelson has already been identified as a member of the Wedge. Stephen C. Meyer and Paul Chien are discussed below at IV. F, where there is also more information on this paper.

⁸³ See Davis and Kenyon, *Of Pandas and People*, 22.

⁸⁴ See Davis and Kenyon, *Of Pandas and People*, 99-100. This rejection of natural causation and the assertion of abrupt appearance amounts to a definition of ID as the instantaneous creation of life by divine intervention. Compare this to YEC Richard Bliss's 1988 definition of "creative design": "*Creative design or abrupt appearance submodel*—all life and life processes were designed to function just as we observe them today. Life appeared quickly on the scene. The designer for all of this was the God of creation. The Creator not only created and designed life but also gave purpose to it." (emphasis added) See Bliss, *Origins*, 9.

⁸⁵ See Dembski, "The Intelligent Design Movement." See the extensive list of resources on *Pandas* at the National Center for Science Education at www.ncseweb.org/article.asp?category=21. Accessed on March 15, 2005.

⁸⁶ See Pearcey, "Opening the 'Big Tent' in Science."

⁸⁷ See Bliss, *Origins*, 33.

master intellect. "^^ But there is also an undisguised disclosure of *Pandas'* creationist content on p. ix of both the 1989 and 1993 editions, where there is an explicit justification for teaching "creation": "Recently the U.S. Supreme Court made it clear that teachers have the right to present non-evolutionary views in their classrooms. This is significant, since a survey of high school biology teachers in Ohio at about the same time showed that roughly one fifth were already presenting *the idea of creation* in their science classes, and a quarter of the teachers surveyed believed that the subject should be included in science classrooms."⁸⁹ (emphasis added) This statement in *Pandas* is a direct reference to *Edwards*, citing it to claim that teaching *creationism* is legal.

According to its introduction, *Pandas* presents "a favorable case for intelligent design."⁹⁰ The Foundation for Thought and Ethics holds the copyright to *Pandas*, and "Houghton Publishing Co." appears to be a name assumed by the Dallas, TX, agricultural publishing firm Horticultural Printers, Inc., for the purpose of publishing *Pandas*. According to an article about FTE by John A. Thomas, Houghton had published no previous books and employed neither writers nor science advisors, leading Thomas to conclude that "*Pandas* is entirely the creation of FTE."⁹¹ According to a document apparently included with IRS materials related to FTE's articles of incorporation, the Foundation for Thought and Ethics was established "to introduce Biblical perspective into the mainstream of America's humanistic society, confronting the secular thought of modern man with the truth of God's word."⁹² This document also refers to the plans for *Pandas*:

Nearing completion, our first project is a rigorous scientific critique of the theory of pre-biotic evolution. *Next, we will develop a two-model high school biology textbook that will fairly and impartially give scientific evidences for creation side by side with evolution.* (In this case, Scripture or even religious doctrine would violate the separation of church and state.) A credentialed author team and a consulting editorial board of scholars are being

^ See Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas: Houghton Publishing Company, 1989), 58; and Percival Davis and Dean H. Kenyon, *Of Pandas and People* (Dallas: Houghton Publishing Company, 1993), 58.

⁸⁹ This reference is to data in Michael Zimmerman, "The Evolution-Creation Controversy: Opinions of Ohio High School Biology Teachers," *Ohio Journal of Science* 87 (1987): 115-25. *Pandas* selectively emphasizes the minority of teachers who favored teaching creationism. An abstract of the article points out that the great majority of the Ohio teachers in the survey favored teaching evolution rather than creationism: "Ohio high school biology teachers are far more likely to support the teaching of evolution, and far less likely to support the teaching of creationism than is the public at large. . . . Teachers favoring religion and prayer in the public schools are significantly more likely to teach creationism in their biology courses than those opposed." See the abstract at www.skepticfiles.org/ev02/ohiosrvy.htm. Accessed on March 17, 2005.

⁹⁰ See Davis and Kenyon, *Of Pandas and People*, ix.

⁹¹ See Thomas, "The Foundation for Thought and Ethics," 18.

⁹² See "What Is the Foundation for Thought and Ethics?" ca. 1980. On file with the National Center for Science Education.

assembled for the project. The manuscript will be placed with a secular publisher for publication, (emphasis added)

Besides the obvious use of the word "creation" above, a number of things in this reference to *Pandas* (FTE's only high-school textbook of this kind) mark it as a creationist book. First, "two-model" is a clear reference to creationism (see Paul Nelson's use of this term in IV. B.) Second, the plural "evidences" is commonly (though not exclusively) used in Christian apologetics, of which creationism is an integral part (see I. A.). (A lawyer for the plaintiffs in *Edwards* noted the repeated use of this term in the 1981 Louisiana Balanced Treatment for Creation-Science and Evolution-Science Act.)⁹³ Moreover, the phrase "in this case" indicates FTE's attempt to avoid constitutional problems with this particular book, suggesting a covertly religious aim. There is evidence that this is the case. In a 1994 *Wall Street Journal* article, Erik Larson reports that Johnson was disappointed that *Pandas* authors had to conceal the identity of the designer:

To counter objections that "Pandas" would bring religion into the classroom, the [Foundation for Thought and Ethics] suggested a response [to be used by the book's promoters]: "I agree that personal beliefs should not be taught in science classrooms, but intelligent design is not a personal belief; it is accepted science, a view that is held by many highly qualified scientists."

But even Mr. Johnson, the Berkeley law professor, says a bit more candor about the nature of the designer might be in order. "You're playing Hamlet without Hamlet if you don't say something about that," he says. He exonerates the authors, however. "The fact is they're working against enormous prejudice here, and enormous bigotry. And they're trying to put it in terms that the courts and science will allow to exist."⁹⁴

The stated intent to use a secular publisher points to FTE's identity as a religious organization. FTE's articles of incorporation describe its primary purpose as "both religious and educational, which includes, but is not limited to, proclaiming, publishing, preaching, teaching, promoting, broadcasting, disseminating, and otherwise making known the Christian gospel and understanding of the Bible and the light it sheds on the academic and social issues of our day,"⁹⁵

There is also evidence that *Pandas* was understood by its creators as a creationist book even before a publisher was secured. Originally intended for publication under the title *Biology and Origins*, FTE president Jon Buell wrote a January 1987 letter to Jones and Bartlett Publishers soliciting interest in the manuscript. Referring to the book's potential profits, Buell made the following pitch, which includes a reference to the anticipated *Edwards v. Aguillard* ruling:

⁹³ See Douglas Theobald, "Evidences?" at www.talkorigins.org/faqs/condesc/evidences.html. Accessed on March 9, 2005.

⁹⁴ See Larson, "Darwinian Struggle."

⁹⁵ See "Articles of Incorporation of the Foundation for Thought and Ethics," filed in the Office of the Secretary of State of Texas, December 5, 1980. On file with the National Center for Science Education.

The enclosed projections showing revenues of over 6.5 million [dollars] in five years are based upon modest expectations for the market provided the U. S. Supreme Court does not uphold the Louisiana "Balanced Treatment Act." *If, by chance it should uphold it, then you can throw out these projections, the nationwide market would be explosive* *fi*§ (emphasis added)

The *Edwards* case had been argued on December 10, 1986, shortly before Buell wrote the letter, and he was basing the book's estimated profits on the outcome. The notable aspect of his projection is that he clearly believed that higher profits depended on a ruling favorable to creationists. Awaiting the ruling (which was handed down a few months later on June 19, 1987), Buell is saying that the upholding of the Louisiana law, which required that creation science be taught in a public school whenever evolution was taught, would create an "explosive" market for the textbook that would be published three years later as *Of Pandas and People*. If the Louisiana creationists won, so would *Pandas*. This is tantamount to an admission that *Pandas* is a creationist textbook.⁹⁷

There is also more evidence of the religious intent of *Pandas*. A 1992 FTE fundraising letter from Buell cites the upcoming 1993 edition of *Pandas* as an example of what FTE was doing to "help restore uncoerced moral and spiritual choice to young people." Citing the transfer of political power that year, Buell invokes a biblical story about the transfer of loyalty from King Saul to David and stresses the need to "understand the times, with knowledge of what Israel should do" (I Chron. 12:32).⁹⁸ Buell offers *Pandas* as the source of such knowledge. Requesting financial support to help "oppose the tide of naturalism and atheism" in public schools, he assures donors that they will be making it possible for public school students to "learn the truth about how our world was made, and to appreciate the fact that they are not just animals."⁹⁸

⁹⁶ See the letter from Jon Buell to Arthur C. Bartlett, Jones and Bartlett Publishers, Inc., January 30, 1987. On file with the National Center for Science Education. The letter refers to the book as *Biology and Origins*. Buell's December 1988 letter announcing the publication of the manuscript by Houghton Publishing explains the name change to *Of Pandas and People*. This letter is also on file with the National Center for Science Education.

⁹⁷ See the Court's decision in *Edwards v. Aguillard* (1987) at <http://caselaw.lp.findlaw.com/cgi-bin/getcase.pl?court=us&vol=482&invol=578>. Accessed on March 31, 2005.

⁹⁸ See letter from Jon A. Buell, Foundation for Thought and Ethics, December 1992. On file with the National Center for Science Education.

D. Intelligent design as a continuation of traditional American creationism. My research, exemplified by the information above, reveals ID to be the newest variant of traditional creationism. The general elements of creationism are (1) belief in the creation of the universe and (usually) continuing divine intervention by a supernatural being; (2) staunch antievolutionism based on theological, ideological, moral and political grounds; (3) rejection of established scientific methodology and the lack of any methodology or empirical data to support their own claims; and (4) the explicit or implicit grounding of anti-evolutionism in scripture. ID meets all of these criteria, as shown in the following examples:

(1) An early CRSC website announced that "today new developments in biology, physics, and artificial intelligence are raising serious doubts about scientific materialism and re-opening the case for the supernatural."⁹⁹ (2) The "Wedge Strategy" document expresses the ID movement's opposition to evolution for a number of reasons, none of them scientific: "Debunking the traditional conceptions of both God and man, thinkers such as Charles Darwin, Karl Marx, and Sigmund Freud portrayed humans not as moral and spiritual beings, but as animals or machines who inhabited a universe ruled by purely impersonal forces and whose behavior and very thoughts were dictated by the unbending forces of biology, chemistry, and environment. This materialistic conception of reality eventually infected virtually every area of our culture, from politics and economics to literature and art."¹⁰⁰ (3) Despite ID proponents' rejection of the naturalistic methodology of science, William Dembski has admitted that the ID movement has produced no science of its own: "Because of ID's outstanding success at gaining a cultural hearing, the scientific research part of ID is now lagging behind."¹⁰¹ (See IV. H. below for more discussion of ID proponents' failure to do scientific research.) (4) And although ID proponents for the most part are not biblical literalists, they do ground their views in scripture; they have simply substituted the New Testament Gospel of John for the Old Testament Book of Genesis as the ground of ID in keeping with Phillip Johnson's desire to unite creationists of all kinds around the minimalist concept of "mere creation." Rejecting the power of natural selection to "produce a plant or animal," Johnson appeals to the Bible: "I looked for the best place to start the search [for the source of life on Earth] ... and I found it in the prologue to the Gospel of John: 'In the beginning was the Word.'"¹⁰² Dembski echoes Johnson's invocation of this New Testament

⁹⁹ See Center for the Renewal of Science and Culture, "Life After Materialism," at <http://web.archive.org/web/19961103063546/www.discovery.org/crsc.html>. Accessed on March 14, 2005.

¹⁰⁰ See "The Wedge Strategy."

¹⁰¹ See William A. Dembski, "Becoming a Disciplined Science: Prospects, Pitfalls, and Reality Check for ID," at www.designinference.com/documents/2002.10.27.Disciplined_Science.htm. Accessed on March 14, 2005.

¹⁰² See John Perry, "Courtly Combatant," *World*, December 13, 2003, at <http://am.org/docs2/news/JohnsonDaniel121303.htm>. Accessed on March 14, 2005.

verse when he calls ID "the Logos of John's Gospel restated in the idiom of information theory."¹⁰³

In addition to these elements of creationism, ED shares another characteristic with its creationist forebears, namely, the rejection of theistic evolution, i.e., the view that God used natural, evolutionary processes to create Earth's life forms. The YEC Institute for Creation Research considers theistic evolution an unacceptable compromise with evolutionary theory: "There is no harmonizing or fence-straddling here; one must make a choice between holding to theistic evolution or believing the plain statements in the Bible."¹⁰⁴ Dembski likewise asserts that "*Design theorists are no friends of theistic evolution*"¹⁰⁵ (emphasis in original)

There is much additional evidence of ID's being the newest variant of American creationism. In the mid-1990s, when the Center for the Renewal of Science and Culture was established and the ID movement needed funding and supporters, revealing the movement's true nature was important. The Wedge had not yet taken a high public profile, and ID proponents were candid about their identity. In a 1995 article in the Moody Bible Institute's *Moody Magazine*, Mark Hartwig, a managing editor for the Foundation for Thought and Ethics who later became a CRSC fellow, openly referred to ID as creationism. Recalling the Wedge's 1992 conference at Southern Methodist University, Hartwig observed that "creationists and evolutionists met as equals to discuss serious intellectual questions" and added, "Creationists are still far from winning, but they believe things are getting better."¹⁰⁶ (A sidebar to this article cites *Of Pandas and People* as a recommended ID resource.) In 1996, founding Wedge member Jonathan Wells (see IV. F. below), asserting that "the most vocal advocates of design in the creation-evolution controversies ... are creationists rather than theistic evolutionists," referred explicitly to "creationists such as law professor Phillip E. Johnson."¹⁰⁷ Johnson himself, when asked in 2000 by *Nightline*'s Ted Koppel "whether this modern theory that you were citing to me is in fact 50 years older than the Darwinian theory," responded, "The idea of divine creation, which is what I'm talking about, [is] that there is an intelligence behind life."¹⁰⁸

¹⁰³ William A. Dembski, "Signs of Intelligence: A Primer on the Discernment of Intelligent Design," *Touchstone*, July-August 1999, 84.

¹⁰⁴ See Richard Nicssen, "Theistic Evolution and the Day-Age Theory," *Impact* (March 1980), Institute for Creation Research, at www.icr.org/pubs/imp/imp-081.htm. Accessed on March 14, 2005.

¹⁰⁵ See William A. Dembski, "What Every Theologian Should Know About Creation, Evolution and Design," at www.origins.org/articles/dembski_theologn.html. Accessed on March 31, 2005.

¹⁰⁶ See Mark Hartwig, "Challenging Darwin's Myths," *Moody Magazine*, May 1995, at www.apologetics.org/articles/myths.html. Accessed on March 14, 2005.

¹⁰⁷ See Jonathan Wells, "Issues in the Creation-Evolution Controversies," *World and I*, January 1996, at www.worldandi.com/public/1996/january/ar6.cfm. Accessed on March 31, 2005.

¹⁰⁸ See Forrest and Gross, *Creationism's Trojan Horse*, 273-74.

E. Religious nature of ID as demonstrated by statements of its proponents. Statements such as Johnson's indicate clearly that ID's essence is fundamentally religious. When combined with Johnson's assertion that the "defining concept" of the ID movement is "theistic realism" (see IV. F. below), the case for ID as religious, based on the statements of its own leaders, is undeniable. But there are additional statements that add even more weight to the case for ID as a religious belief.¹⁰⁹ In a 1999 article in *Touchstone* magazine about detecting intelligent design in nature, Dembski concluded by pointing to ID's foundation in the New Testament Gospel of John: "The world is a mirror representing the divine life. The mechanical philosophy was ever blind to this fact. Intelligent design, on the other hand, readily embraces the sacramental nature of physical reality. Indeed, intelligent design is just the Logos of John's Gospel restated in the idiom of information theory."¹¹⁰ Nancy Pearcey ties ID not only to religion but specifically to Christianity:

By uncovering evidence that natural phenomena are best accounted for by Intelligence, Mind, and Purpose, the theory of Intelligent Design reconnects religion to the realm of public knowledge. It takes Christianity out of the sphere of noncognitive *value* and restores it to the realm of objective *fact*, so that it can once more take a place at the table of public discourse. Only when we are willing to restore Christianity to the status of genuine knowledge will we be able to effectively engage the "cognitive war" that is at the root of today's culture war.¹¹¹ (emphasis in original)

The religious foundations of the Wedge Strategy. The Wedge Strategy is being directed from the Discovery Institute, a Seattle think tank. Although the Discovery Institute avows that it is a secular organization, its major activity, promoting ID, is being carried out for demonstrably religious reasons, as I have shown. Indeed, the Discovery Institute's religious agenda would be difficult to conceal. In *Religion and Public Life in the Pacific Northwest: The None Zone*, Pacific Lutheran University religion professor Patricia O'Connell Kitten says that "religiously inspired think tanks such as the conservative evangelical Discovery Institute, are all part of the religious landscape."¹¹²

¹⁰⁹ In order to show the nature of ID as religious belief, I have also supplemented the empirical data of the kind I present here with more extensive conceptual analysis. For example, I examine the implications of ID leaders' rejection of both methodological and philosophical naturalism. See Gey, Brauer, and Forrest, "Is It Science Yet? Intelligent Design Creationism and the Constitution," at II. C. 5, n. 22.

¹¹⁰ See Dembski, "Signs of Intelligence," 84.

¹¹¹ See Nancy R. Pearcey, "Darwin Meets the Bernstein Bears: The Cultural Impact of Evolution," *Uncommon Dissent: Intellectuals Who Find Darwinism Unconvincing*, ed. William A. Dembski (Wilmington, DE: ISI Books, 2004), 73.

¹¹² See Patricia O'Connell Kitten, "Conclusion: Religious Futures in the None Zone," in *Religion and Public Life in the Pacific Northwest: The None Zone*, ed. Patricia O'Connell Kitten and Mark Silk (New York: Rowman and Littlefield, 2004), 182.

The religious loyalties of ID leaders are the chief factor in the coalescence of the initial group of ID proponents after the *Edwards* ruling.¹¹³ (See IV. A.) Phillip Johnson's *post-Edwards* rejection of the naturalistic definition of science, which he blamed for the creationists' defeat in *Edwards* (see IV. B.), provided the initial ideological framework of the Wedge Strategy. Although anti-naturalism is a longstanding component of creationism, Johnson has made it a central feature of ID creationism, extending his criticism of it into virtually everything he writes. He refuses to accept the naturalistic methodology of science even as a procedural protocol (methodological naturalism). Instead, he persistently conflates science's necessary methodological limitations with the metaphysical position that nothing exists beyond the natural world (philosophical naturalism), and he rejects both, positing a causal connection between naturalistic science and the "triumph of materialism" that the Wedge Document decries. According to ID proponents, the materialistic nature of science has led to the moral decay of society: "The cultural consequences of this triumph of materialism were devastating. Materialists denied the existence of objective moral standards, claiming that environment dictates our behavior and beliefs."¹¹⁴ The Wedge Strategy was developed to reverse these consequences.

The original name of the Discovery Institute subsidiary formed to execute the strategy, the Center for the Renewal of Science and Culture (now the Center for Science and Culture—CSC), reflects the Wedge Strategy's ultimate goal of "Cultural Confrontation & Renewal," to be accomplished by replacing materialistic science "with a science consonant with Christian and theistic convictions." Consistent with the Wedge's religious mission, the CSC's funding comes from conservative Christian individuals and organizations that provide financing for evangelical programs. The MacLellan Foundation and the Stewardship Foundation are major organizational contributors.¹¹⁵ The major individual donor has been millionaire Howard Ahmanson, who has funded the CSC through his organization, Fieldstead and Company. For more than two decades, Ahmanson served on the board of directors and helped fund the Chaldean Foundation, a Christian Reconstructionist organization. Christian Reconstructionism favors, among other things, capital punishment for blasphemy and homosexuality. Ahmanson's purpose in funding his chosen organizations is, in his words, "total integration of biblical law into our lives."¹¹⁶

¹¹³ Johnson recently announced his formation of a "Second Wedge" that consists of "creative writers and other artistic people, because it is illogical that literature and the arts should be dominated by materialist ideas that lead to nihilism and despair. It is not only scientists who need to be liberated from the straitjacket of materialism." See "Interview: The Measure of Design," 65 (at n. 50).

¹¹⁴ See "The Wedge Strategy."

¹¹⁵ For information on CSC's funding and a description of its sources, see Forrest and Gross, *Creationism's Trojan Horse*, 22-23, 148-50, 264-67.

¹¹⁶ For a detailed article on Ahmanson, see Max Blumenthal, "Avenging Angel of the Religious Right," *Salon*, January 6, 2004, at www.salon.com/news/feature/2004/01/06/ahmanson/index_np.html. Accessed on March 17, 2005. For a discussion of Christian Reconstructionism and Ahmanson's ties to it, see Forrest and Gross, *Creationism's Trojan Horse*, 169, 266-67.

Ahmanson no longer serves on the Chalcedon board; he is now on the Discovery Institute's board of directors.¹¹⁷

The Wedge's progress toward its cultural goals can be measured not by its effect on science (since its effect on science is nil) but by the amount of publicity ID proponents have managed to generate and by the results of their efforts so far to influence state science standards, local school board policies, textbook adoption, etc. The Wedge Strategy's five-year goal of "thirty published books on design and its cultural implications" has been met, with new books being published at a fairly steady rate.¹¹⁸ Numerous newspaper and magazine articles have been written about ID.¹¹⁹ The Wedge's grassroots networking throughout the country has generated pro-ID activity in forty states over the last four years.¹²⁰ The current dispute over state science standards in Kansas is a prominent example of such activity.¹²¹

F. Major Wedge leaders at the Center for Science and Culture.

Phillip E. Johnson: Wedge leader and CSC advisor. In explaining what led him to undertake his anti-evolution effort, Phillip Johnson has pointed to personal difficulties that resulted in his religious conversion and subsequent efforts to counteract what he perceives as the morally degenerative influence of evolution in American culture.¹²² (Johnson's view here is not unique.

¹¹⁷ See Ahmanson's Discovery Institute biosketch at www.discovery.org/scripts/viewDB/index.php?command=view&id=23&isFellow=true. Accessed on March 18, 2005.

¹¹⁸ See a selection of ID books on the Access Research Network website at www.arnc.org/amproducts/bookinfo.html. Accessed on March 15, 2005.

¹¹⁹ See a list of hyperlinks to such articles on the Discovery Institute website at www.discovery.org/moreArticles.php?prog रामः=CSC%20-%20Views%20and%20News. Accessed on March 15, 2005.

¹²⁰ See Chris Mooney, "State Your Case," *Doubt and About*, Committee for the Scientific Investigation of Claims of the Paranormal, at www.csicop.org/doubtandabout/anti-evolution/. Accessed on March 15, 2005. This figure comes from the National Center for Science Education, which has produced map graphics indicating which states have been affected. On file with the National Center for Science Education.

¹²¹ See Forrest and Gross, *Creationism's Trojan Horse*, ch. 8, for a discussion of past problems in Kansas and other states. See also the website of Kansas Citizens for Science for information on the current dispute, which is actually an extension of the problem that began in 1999, when creationists deleted evolution from state science standards. KCFS "Updates" provides information on the current problems stemming from the Wedge's activity in Kansas at www.kcfs.org/cgi-bin/ultimatebb.cgi?ubb=forum:f=2. Accessed on March 29, 2005.

¹²² See an example of Johnson's sentiments in Perry, "Courtly Combatant":

Taking Christian morality out of the culture is the logical consequence of the acceptance of Darwinism [according to Johnson]. That has led to no-fault divorce, legalized abortion, a pro-homosexuality agenda, and all the other tragedies of Darwinist moral relativism. If creation is random and purposeless, all truth is relative and God is rightly "relegated to the Never-never Land of Zeus and Santa Claus." Mr. Johnson explains, "Once God is culturally determined to be imaginary, then God's morality loses its foundation and withers away. It may stay

ID creationism conference in 2001.¹²⁸ Moreover, he sees his mission in promoting ID as central to the preservation of Christianity itself:

[Johnson] continues, "When we speak of *God, Jesus, the resurrection*, are we speaking of things that really happened or the things that occur only in a mythical land called religious belief? *If the God of the Bible really is our creator, cares about us and what we do, then our culture has made a terrible mistake in turning away from this God* because we haven't just changed a religious belief, we have repudiated reality."

Phillip Johnson has made it his mission to correct that mistake and the wrong-headed thinking that led to it. He speaks all over the country, [and] heads the Wedge (an organization dedicated to promoting the Intelligent Design theory). . . *M*⁹ (emphasis added)

William A. Dembski: Wedge leader and CSC fellow.¹³⁰ William Dembski traces his involvement in the ID issue to a college experience in which he shared his Christian witness with two seminary students whose faith, according to Dembski, had been shaken by their seminary's instructing them that modern science had undermined the Bible's veracity.¹³¹ Although he believes that some parts of Genesis should be read figuratively rather than literally (a reflection of his status as an old-earth creationist), Dembski rejects human evolution in favor of the special creation of humans by God.¹³² In 1996, he asserted, "I do believe that organisms have undergone some change in the course of natural history (though I believe that this change has occurred within strict limits and that human beings were specially created)."¹³³ Dembski elaborates in detail on his rejection of human evolution in an essay for the upcoming revision of

¹²⁸ Philip Johnson, "The State of the Wedge," delivered at the Darwin, Design, and Democracy II symposium, June 29, 2001, audiocassette. On file with Barbara Forrest. See also Forrest and Gross, *Creationism's Trojan Horse*, 315.

¹²⁹ See Perry, "Courtly Combatant."

¹³⁰ See Dembski's Center for Science and Culture biosketch at www.discovery.org/scripts/viewDB/index.php?command=view&id=32&isFellow=true. Accessed on March 16, 2005. See also Forrest, *Creationism's Trojan Horse*, ch. 5 and 9, for more detailed discussion of Dembski.

¹³¹ See Forrest and Gross, *Creationism's Trojan Horse*, 293.

¹³² See Peter Smith, "Seminary Site to Explore Cosmic Designer Concept," *Louisville Courier-Journal*, February 20, 2005, at www.courier-journal.com/apps/pbcs.dll/article?AID-/20050220/NEWS01/502200431. Regarding the age of the earth, Dembski says, "There's no need . . . to challenge the standard chronologies scientists have assigned to these events (e.g., 12 or so billion years for the age of the universe and 4.5 billion years for the age of the earth)." See William A. Dembski, "Teaching Intelligent Design—What Happened When? A Response to Eugenie Scott," *Metaviews*, February 22, 2001, at www.am.org/docs/dembski/wdjeacMngid0201.htm. Accessed on March 29, 2005.

¹³³ See Dembski, "What Every Theologian Should Know About Creation, Evolution, and Design." Dembski's acceptance of changes in organisms only within "strict limits," i.e., microevolution, is a reference to the creationist rejection of macroevolution. This rejection reflects the biblical view that God created "kinds" of plants and animals and that changes occur only within these kinds.

Of Pandas and People entitled *The Design of Life*: "[W]hen one examines the actual data and arguments, the case for human evolution becomes less obvious.... [O]ne can argue . . . that our common ancestor with *Australopithecus africanus* is more recent than our common ancestor with *Australopithecus afarensis*, and that this common ancestor, in turn, is more recent than our common ancestor with *Australopithecus anamensis*. But, again, this reasoning is based on the assumption that humans evolved in the first place."¹³⁴

Like Johnson, Dembski sees evolution as a threat to religious, and specifically Christian, faith. He believes defending Christianity against "Darwinism" to be his task as a Christian apologist, as he stated in 2002: "The job of apologetics is to clear the ground, to clear obstacles that prevent people from coming to the knowledge of Christ. . . . And if there's anything that I think has blocked the growth of Christ [and] the free reign of the Spirit and people accepting the Scripture and Jesus Christ, it is the Darwinian naturalistic view.... It's important that we understand the world. God has created it; Jesus is incarnate in the world."¹³⁵ In 2005, Dembski reiterated the importance of ID to Christianity in responding to criticism from YEC Henry Morris that ID, as Dembski paraphrased Morris, "was not faithful to the full Christian revelation."¹³⁶ He defends ID as "part of God's general revelation" even while asserting that "no one in the ID movement claims that ID is the Gospel." (Dembski actually did, in effect, say this when he asserted that ID is the "Logos of John's Gospel restated in the idiom of information theory." See IV, E.) Despite his declaration that ID "can be understood apart from the Bible," Dembski then stresses ID's value as a "ground-clearing operation" which, once it "rid[s] us of this ideology [of materialism], . . . opens the path for people to come to Christ."¹³⁷ Finally, defending ID against Morris's charge that ID is "ineffective" at convincing evolutionists of their errors, Dembski cites ID's power to bring about religious conversions: "Take, for instance, the well-known former atheist Antony Flew, whose conversion to theism (albeit a weak form of it) recently made international news. What did Flew cite as a key factor in his conversion? Not creationism but rather design-theoretic arguments for the intelligent origin of life."¹³⁸

¹³⁴ See William A. Dembski, "Reflections on Human Origins," version 2.1, August 18, 2004, 2-3, at www.designinference.com/documents/2004.06.Human_Origins.pdf. Forthcoming in *The Design of Life* (revised version of *Pandas*).

¹³⁵ See Steve Benen, "The Discovery Institute: Genesis of 'Intelligent Design,'" *Church and State*, May 2002, at www.aug.org/site/News2?page=NewsArticle&id=5582&abbr=cs. Accessed on March 15, 2005.

¹³⁶ See William A. Dembski, "Intelligent Design's Contribution to the Debate over Evolution: A Reply to Henry Morris," at www.designinference.com/documents/2005.02.Reply_to_Henry_Morris.htm. See also Morris's criticisms of ID in Jonathan Sarfati, "ID Theorist Blunders on Bible," *Answers in Genesis*, February 7, 2005, at www.answersingenesis.org/docs/2005/0207_dembski.asp. Accessed on March 15, 2005.

¹³⁷ See Dembski, "Intelligent Design's Contribution to the Debate over Evolution."

¹³⁸ There is some uncertainty as to the precise status of Flew's conversion, mostly because of Flew's own uncertainty about what he currently believes. The point, however, is not whether Flew's conversion is genuine but that Dembski attributes it to ID. See Richard Carrier, "Antony Flew Considers God—Sort Of," *Secular Web Kiosk*, at www.secweb.org/assq.asp?AssetID=369. Accessed on March 15, 2005.

Dembski's view of ID as Christian apologetics. Dembski has always seen his promotion of ID as an integral part of his role as a Christian apologist (see definition of apologetics in I. A.). As a Princeton Theological Seminary student in the mid-1990s, he began a student movement to reintroduce the study of apologetics into the curriculum PTS. He wrote essays that he later incorporated into a 2001 book, *Unapologetic Apologetics: Meeting the Challenges of Theological Studies*, which he edited with his Wedge colleague Jay Wesley Richards and to which Phillip Johnson contributed the foreword. Calling Dembski and Richards "Christian revolutionaries," Johnson assures readers that the "intelligent design (or 'mere creation') movement" stands behind their student movement. Two recent articles reconfirm Dembski's continuing commitment to promoting ID as a way to shore up the defense of Christianity. In June 2005, he will become director of the newly established Center for Science and Theology at the Southern Baptist Theological Seminary in Louisville, KY. The September 16, 2004, *BP [Baptist Press] News* quotes Dembski's affirmation of his apologetics commitment:

Theology, [Dembski] said, underpins all of his views of science and intelligent design. "I started out as a straight research mathematician but got into these questions of philosophy and theology because I was so exercised in my spirit about the unbelief I saw in the academy [and] why it seemed so reasonable to disbelieve the Christian faith," Dembski said. *"That is really what motivated me to work on Christian worldviews and apologetics and it is in the background of my work on intelligent design as well.* Theology is where my ultimate passion is and I think that is where I can uniquely contribute. ... I think the opportunity to deal with students ... is going to be important because science has been such an instrument used by the materialists to undermine the Christian faith and religious belief generally."¹³⁹ (emphasis added)

A February 20, 2005, article in the Louisville, KY, *Courier-Journal* points to Dembski's college religious conversion as the beginning of his rejection of evolution and credits his promotion of ID for his "winning admirers among conservative Christians, who see his views as bolstering their belief in a creator God."¹⁴⁰ Dembski himself sees his new job, where his duties include training ministers, as "an opportunity to mobilize a new generation of scholars and pastors not just to equip the saints but also to engage the culture and reclaim it for Christ." His job at the seminary will serve to further execute the Wedge Strategy since it comprises two of the strategy's stated goals: "to build up a popular base of support among our natural constituency, namely, Christians," and to bring it about that "seminaries increasingly recognize and repudiate naturalistic presuppositions."

Dembski has also promoted ID to his religious audience in a major book, *Intelligent Design: The Bridge Between Science and Theology*. He speaks in overtly Christian language as he explains ID to his readers. Telling them that "any view of the sciences that leaves Christ out of the picture must be seen as fundamentally deficient," he stresses that "Christ is never an *addendum* to a scientific theory but always a *completion*" and that "the conceptual soundness of a scientific

¹³⁹ See Jeff Robinson, "Dembski to Head Seminary's New Science and Theology Center," *BP News*, September 16, 2004, at www.bpnews.net/bpnews.asp?id=19115. Accessed on March 16, 2005.

¹⁴⁰ See Smith, "Seminary Site to Explore Cosmic Designer Concept."

theory cannot be maintained apart from Christ,"¹⁴¹ (emphasis in original) Moreover, Dembski indicates that ID depends upon the reality of miracles when he criticizes 17th-century philosopher Benedict Spinoza and 18th-century philosopher and theologian Friedrich Schleiermacher for rejecting them: "By rendering miracles incoherent Spinoza and Schleiermacher undercut all nonnaturalistic [Dembski's euphemism for supernatural] modes of divine activity and thereby rendered design incoherent as well." Dembski points out the consequences for ID of the elimination of miracles when he laments that "the idea that God could act identifiably as a designing intelligence was lost" along with them.¹⁴²

Identification of the intelligent designer as God. Dembski, like all other ID proponents, rejects naturalism both as the methodology of science and as metaphysics. This rejection is a clear indication of the supernaturalism of ID since supernaturalism is the only conceptual alternative to naturalism. Dembski has on various occasions specified not only the supernaturalism of the designer but also the designer's identity as God. In 1992 (the early days of the Wedge, when ID proponents selected their terminology less strategically), he wrote in an article for the Wedge's first conference that any intelligent being who could perform feats such as providing humans with answers to intractable mathematical problems, communicating a cure for AIDS, and warning of natural disasters years before they occur would be a "supernatural intelligence." Dembski explained the purpose of his argument: "I want here to examine scientific naturalism. I am going to argue that this view has a serious defect—it is *incomplete*. As a consequence of this defect I shall argue that it is legitimate within scientific discourse to entertain questions about *supernatural design*."¹⁴³ (emphasis added) Yet in 2000, when addressing the relatively mainstream audience of the *Metaviews* website, Dembski stated that "taken strictly as a scientific theory, intelligent design refuses to speculate about the nature of this designing intelligence."¹⁴⁴ Such denials are meaningless since no scientific theory of ID exists. In *The Design Revolution*, reiterating to his ID followers his rejection of naturalism because it "allows no place for intelligent agency," he identifies the designer as God: "Theism (whether Christian, Jewish or Muslim) holds that God by wisdom created the world. The origin of the world and its subsequent ordering thus result from *the designing activity of an intelligent agent—God*."¹⁴⁵ (emphasis added)

¹⁴¹ See Dembski, *Intelligent Design: The Bridge Between Science and Theology*, 206-210.

¹⁴² See Dembski, *Intelligent Design: The Bridge Between Science and Theology*, 50-51.

¹⁴³ See William A. Dembski, "The Incompleteness of Scientific Naturalism," written for symposium entitled *Darwinism: Scientific Inference or Philosophical Preference?*, Southern Methodist University, March 26-28, 1992, at www.leaderu.com/orgs/oc/darwinism/chapter7.html. Accessed on March 31, 2005.

¹⁴⁴ See William A. Dembski, "Intelligent Design Is not Optimal Design," *Metaviews*, February 2, 2000, at www.leaderu.com/offices/dembski/docs/td-optimal.html. Accessed on March 16, 2005.

¹⁴⁵ See William A. Dembski, preface to *The Design Revolution* (Downers Grove, IL: Inter Varsity Press, 2004), 22, at www.gospel.com.net/ivpress/title/exc2375-P.pdf. Later in this preface, Dembski attempts to disconnect ID from religion: "Intelligent design has theological implications, but it is not a theological enterprise. Theology does not own intelligent design. Intelligent design is not an evangelical Christian thing, or a generically Christian thing or even a generically theistic thing" (25). Aside from the evidence of ID's intrinsic religiosity already cited in this

Jonathan Wells, Wedge leader, CSC fellow, and Unification Church leader.¹⁴⁶ The anti-evolution efforts of Jonathan Wells, a founding Wedge member, reflect the influence of Rev. Sun Myung Moon, leader of the Unification Church, whom Wells calls "Father." Wells recounts Moon's urging him to earn a second Ph.D. in biology after first earning one in theology: "Father's words, my studies, and my prayers convinced me that I should devote my life to destroying Darwinism."¹⁴⁷ A Unification Church article about Wells reveals the expectation that his two degrees qualify him not only to attack evolution but also to engage in apologetics on its behalf as Dembski does for Christianity:

Now, equipped with doctorates in theology and biology from Yale University and U.C. Berkeley respectively, he is uniquely qualified to carry his plan to fruition. The ambitious plan which began to take shape in 1976 [when Wells was a student at the Unification Theological Seminary] can be stated today with precision and conviction; "To defend and articulate Unification theology especially in relation to Darwinian evolution," [Wells] said. It was a plan which took its first steps in his UTS thesis.... That second Ph.D. in biology from the University of California at Berkeley has been invaluable in helping Dr. Wells to fulfill his goal. With his academic credentials he is in a uniquely powerful position to attack Darwinian evolution....¹⁴⁸

However, despite having earned genuine academic credentials in biology in 2000, Wells does no scientific research, as he admitted in 2001: "My current research is limited to reviewing the scientific literature. I am not now doing laboratory research. I have begun several interesting experimental projects, but they are on hold until the current [ID] controversy is resolved."¹⁴⁹ Since he completed his Ph.D. in biology, he has promoted ID full time, a promotion that includes aggressively publicizing his ID book *Icons of Evolution*.¹⁵⁰

report, such as Dembski's "ID as Logos" comment, such disavowals are, again, meaningless without a genuinely scientific theory of ID. Dembski's disavowal of ID's religiosity therefore serves a purely rhetorical purpose for him. Aside from the remarks included in this note, Dembski's preface is permeated with talk of God and the anti-naturalism that is a standard feature of ID creationism.

¹⁴⁶ See Wells's Center for Science and Culture biosketch at www.discovery.org/scripts/viewDB/index.php?command=view&id=41&isFellow=true. Accessed on March 16, 2005. See also Forrest and Gross, *Creationism's Trojan Horse*, ch. 5, for more detailed discussion of Wells.

¹⁴⁷ See Jonathan Wells, "Darwinism: Why I Went for a Second Ph.D.," True Parents website (Unification Church), at www.trueparents.org/library/unification/talks/wells/DARWIN.htm. Accessed on March 29, 2005.

¹⁴⁸ See "Dr. Jonathan Wells Returns to UTS," True Parents (Unification Church) website, at www.trueparents.org/library/unification/publications/corner/cs970506/esl_dr-jonathan.html. Accessed on March 16, 2005.

¹⁴⁹ See "Interview with Jonathan Wells, January 2001," Intelligent Design Undergraduate Research Center, at <http://web.archive.org/web/20040215023530/http://www.idure.org/wellsinterview2001.shtml>. Accessed on March 16, 2005.

¹⁵⁰ See a review of *Icons of Evolution* by Alan Gishlick at the National Center for Science Education's website at www.ncseweb.org/icons/. Accessed on March 16, 2005.

Stephen C. Meyer, Wedge leader and CSC Program Director.¹⁵¹ Meyer is the co-author, with Mark Hartwig, of the "Note to Teachers" in the 1993 edition of *Pandas*, where he and Hartwig deny that ID is religion, contradicting Meyer's statement in 1995 (see below in this section) that he became interested in the "origins debate" because it is theistic.¹⁵² He is also co-author of a law review article contending that *Edwards* does not apply to ID because ID is science rather than creationism.¹⁵³ Meyer, a philosopher and historian of science, has played an integral role in the ID movement and the founding of the Wedge. He met Phillip Johnson in 1987 when Johnson was on sabbatical in England and Meyer was working on his Ph.D. in the history of science at Cambridge.¹⁵⁴ However, philosopher of science Robert T. Pennock points out that Meyer "had already published an attack on evolution that charged it is based upon naturalistic assumptions—the centerpiece of the ID attack that Philip Johnson would begin to press in 1991—even before he was introduced to Johnson in 1987."¹⁵⁵

Although an integral part of the Wedge Strategy from the beginning, only in the last few years has Meyer taken a high public profile in promoting ID. One example is his appearance before the Ohio Board of Education in March 2002. ID proponents had explicitly asked the Ohio Board of Education to include "intelligent design theory" in Ohio's new science standards.¹⁵⁶ The ensuing controversy prompted Meyer and Bruce Chapman, president of the Discovery Institute, to change their strategy to merely asking that the board allow teachers to "teach the controversy" concerning evolution.¹⁵⁷ (See "Strategic use of terminology" in IV. G. below.) A recent

¹⁵¹ See Meyer's Center for Science and Culture biosketch at www.discovery.org/scripts/viewDB/index.php?command=View&id=11&isFellow=true. Accessed on March 16, 2005.

¹⁵² See Mark D. Hartwig and Stephen C. Meyer, "A Note to Teachers," in *Of Pandas and People*, 160-61.

¹⁵³ See David K. DeWolf, Stephen C. Meyer, and Mark Edward DeForrest, "Teaching the Origins Controversy: Science, Or Religion, Or Speech?" *Utah Law Review* 39 (2000), at www.aml.org/docs/dewolf/utah.pdf. Accessed on March 29, 2005.

¹⁵⁴ See Larry William, *Where Darwin Meets the Bible: Creationists and Evolutionists in America* (New York: Oxford University Press, 2002), 66-67.

¹⁵⁵ See Robert T. Pennock, "DNA by Design? Stephen Meyer and the Return of the God Hypothesis," in *Debating Design: From Darwin to DNA*, ed. William A. Dembski and Michael Ruse (New York: Cambridge University Press, 2004), 130-48.

¹⁵⁶ See Science Excellence for All Ohioans (SEAO), "The Ohio Firestorm of 2002," at www.sciohio.org/firestorm.html. Accessed on March 29, 2005. SEAO is the Ohio ID creationist group that worked with Wedge ID proponents in an attempt to get ID inserted into the state science standards. For a detailed discussion of the Wedge's efforts in Ohio, see Forrest and Gross, *Creationism's Trojan Horse*, 227-39.

¹⁵⁷ See an op-ed Meyer wrote discussing this compromise, "Teach the Controversy," *Cincinnati Enquirer*, March 30, 2002, at www.aml.org/docs/meyer/sm_teachthecontroversy.htm. Accessed on March 17, 2005. For an account of this tactic and the euphemisms currently used to promote ID, see Barbara Forrest and Paul R. Gross, "Intelligent Design Has Distinctly Evolutionary Nature," *Science and Theology News*, December 2004, at www.stcnws.org/archives/2004_december/books_authors_1204.html. For a more detailed version of this article, see

Washington Post article reports that "Meyer said he and ... Chapman devised the compromise strategy ... when they realized a dispute over intelligent design was complicating efforts to challenge evolution in the classroom... The idea was to sow doubt about Darwin and buy time for the 40-plus scientists affiliated with the [Discovery] institute to perfect the theory."¹⁵⁸ The tactical shift that Meyer and Chapman made in Ohio is typical of how Wedge members have operated since beginning their efforts to influence school boards and state boards of education. An ID proponent typically makes an explicit proposal that ID be taught and then, after arousing opposition, alters the proposal's wording in an attempt to sanitize it of explicit references to ID. Meyer now appears to have made a similar tactical shift with respect to the Dover case, as reported recently in the *Seattle Times*:

Ohio got it right, [Meyer] says, when its state Board of Education voted in 2002 to require students to learn that scientists "continue to investigate and critically analyze aspects of evolutionary theory." ... The School Board in Dover, Pa., however, got it wrong, Meyer said, when it required instruction in intelligent design. ... Intelligent design isn't established enough yet for that, Meyer says.^{*59}

Ironically, even though Meyer's statement about Dover can be plausibly viewed as made for strategic purposes, it also reflects the true status of "intelligent design theory." No scientist has yet perfected the theory, nor has any scientist produced original data to support ID. In fact, Meyer's writing on ID is notable for his recycling of old work as new work, a "cut-and-paste approach," as Pennock terms it.⁶⁰ The most salient example is Meyer's recent article in the *Proceedings of the Biological Society of Washington*, which the ID movement touts as the first ID paper to be published in a mainstream, peer-reviewed journal (see IV. H., note 193 and note 199 with accompanying text). Wesley Elsberry of the National Center for Science Education has documented this paper's identity as the fourth in a series of variants of essentially the same paper. The first version was posted in 2001 on the website of the Intelligent Design Undergraduate Research Center,⁶¹

Barbara Forrest and Paul R. Gross, "The Evolution of Intelligent Design," at www.creationismstrujanhorse.com/STNewsQuiltie.pdf. Accessed on March 17, 2005.

¹⁵⁸ See Peter Slevin, "Battle on Teaching Evolution Sharpens," *Washington Post*, March 14, 2005, A01, at www.washingtonpost.com/ac2/wp-dyn/A32444-2005Mar13?language=printer. The "40-plus scientists" are the forty-one fellows of the Center for Science and Culture. See the list of fellows at www.discovery.org/csc/fellows.php. Most of these people are not actually scientists, and among the few that are, none is an evolutionary biologist. Accessed on March 17, 2005.

¹⁵⁹ See Linda Shaw, "Does Seattle Group 'Teach Controversy' or Contribute to It?" *Seattle Times*, March 31, 2005, at http://seattletimes.nwsource.com/html/localnews/2002725932_design31m.html. Accessed on March 31, 2005.

¹⁶⁰ See Pennock, "DNA by Design?"

¹⁶¹ See Wesley Elsberry, "Meyer and DeJa Vu Revisited," *Panda's Thumb*, September 26, 2004, at www.pandasThumb.org/pt-archives/000508.html. Accessed on March 17, 2005.

Meyer was attracted to ID because it is theistic, as he indicates in recalling a conference he attended: "I remember being especially fascinated with the origins debate at this conference. It impressed me to see that scientists who had always accepted the standard evolutionary story were now defending a theistic belief, not on the basis that it makes them feel good or provides some form of subjective contentment, but because the scientific evidence suggests an activity of mind that is beyond nature. I was really taken with this."¹⁶² This conference appears to have been the 1988 conference, "Sources of Information Content in DNA," convened by Charles Thaxton, whose work Dembski credits with beginning the ID movement (see IV. A.). According to ID proponent Thomas Woodward (see I. A.), the purpose of the conference was "to explore and test Thaxton's theses—that the informational sequences of DNA yield a strong inference to intelligent causation and that scientists should have the freedom to consider the explanatory notion of *intelligent cause*."¹⁶³ (emphasis in original) So this would be the theistic idea Meyer found so attractive.

Pennock points out that Meyer does not believe there is any justification for truth claims apart from religious revelation.¹⁶⁴ In fact, Meyer contends that science presupposes not only the existence of a supernatural being, but a foundation in Christianity:

Given the current and historical difficulty human philosophic systems have faced in accounting for truth as autonomous from revelation, scientists and philosophers might be most receptive to *systems of thought that find their roots in Biblical theology*. The Judeo-Christian scriptures have much to say about the ultimate source of human reason, the existence of a real and uniformly ordered universe, and the ability present in a creative and ordered human intellect to know that universe. Both the Old and New Testaments define these relationships such that *the presuppositional base necessary to modern science* is not only explicable but meaningful. Moreover, all of us would do well to reflect on the scriptural axiom that "*In Him all things hold together*," [Colossians 1:17] and further reflect on the serious consequences to a society and culture that divorce spiritual thought not only from moral considerations *but scientific ones as well*!^ (emphasis added)

¹⁶² See "By Design: A Whitworth Professor Takes a Controversial Stand to Show that Life Was No Accident: Stephen C. Meyer Profile," *Whitworth Today*, Winter 1995, at www.am.org/docs/meyer/sm_bydesign.htm. Accessed on March 16, 2005.

¹⁶³ See Thomas Woodward, *Doubts About Darwin: A History of Intelligent Design* (Grand Rapids, MI: Baker Books, 2003), 88. See also a list of attendees, including Meyer, in *ARN Announce*, Access Research Network, June 29, 2001, at www.am.org/announce/announce0601no16.htm. Accessed on March 16, 2005.

¹⁶⁴ See Pennock, "DNA by Design?"

¹⁶⁵ See Stephen C. Meyer, "Scientific Tenets of Faith," *Perspectives on Science and Christian Faith* 38 (March 1986): 40-42, at www.asa3.org/ASA/PSCF/1986/PSCF38-3-Meyer.html. Accessed on March 17, 2005.

The "Him" to which Meyer refers is Jesus Christ.¹⁶⁶

Supporting Wedge figures (selected). The Wedge proper consists of the forty-one fellows of the Center for Science and Culture, led by Stephen Meyer (Program Director), John G. West (Associate Director), and Phillip Johnson (Advisor). Many rarely assume a public profile in defense of ID, but several have played particularly prominent roles in the advance of the Wedge Strategy. Among these are Paul Nelson, Paul Chien, and Dean Kenyon, the creation scientist who joined the ID movement after the *Edwards* ruling.

Paul Nelson: Wedge Header and CSC fellow.¹⁶⁸ Nelson, a philosopher and founding Wedge member, is also a young-earth creationist, as pointed out above. He is an important liaison with the YEC community, whose support Phillip Johnson has sought on behalf of the ID movement. In an article entitled "Young-Earth Creationism," written with YEC and CSC fellow John Mark Reynolds, he urges fellow YECs to join forces with the ID movement. (See IV. B.) Nelson, like his fellow ID proponents, rejects theistic evolution and naturalism. He argues that "without an ability to turn to the supernatural, science will be left with hopelessly false naturalistic speculations about the reason physical objects exist."¹⁶⁹ Although he is a biblical literalist, he believes that the threat posed by naturalism demands that debating the question of the age of the earth take second place to forging "a truce" between YECs and OECs. Once the two groups "make common cause" in order to "establish their most basic beliefs," they can revisit their disputes over such divisive topics as the age of the earth. In fact, Nelson and Reynolds argue that *"to fail to unify with such people of goodwill [as old-earth creationists] in the assault on naturalism would not just be foolish; it would be intellectual treason."*¹⁷⁰ (emphasis in original)

¹⁶⁶ See this verse under the heading "The Supremacy of Christ" in the New International Version of the New Testament, which Meyer cites, at www.biblegateway.com/passage/?book_id=58&chapter=1&version=31. Accessed on March 17, 2005.

¹⁶⁷ See this verse under the heading "The Supremacy of Christ" in the New International Version of the New Testament, which Meyer cites, at www.biblegateway.com/passage/?book_id=58&chapter=1&version=31. Accessed on March 17, 2005.

¹⁶⁸ See Nelson's Center for Science and Culture biosketch at www.discovery.org/scripts/viewDB/index.php?command=view&id=45&isFellow=true. Accessed on March 17, 2005.

¹⁶⁹ See Paul Nelson and John Mark Reynolds, "Young-Earth Creationism," in *Three Views on Creation and Evolution*, ed. J. P. Moreland and John Mark Reynolds (Grand Rapids, MI: Zondervan Publishing House, 1999), 46.

¹⁷⁰ See Paul Nelson and John Mark Reynolds, "Conclusion," in *Three Views on Creation and Evolution*, ed. J. P. Moreland and John Mark Reynolds (Grand Rapids, MI: Zondervan Publishing House, 1999), 100.

Paul Chien; Wedge member and CSC fellow.¹⁷¹ Chien, a marine biologist, is named in the "Wedge Strategy" as the scientist who will lead the Wedge's paleontology program (see IV. H. below). However, Chien has no credentials in this field. His usefulness to the Wedge lay in cultivating a relationship in the late 1990s with paleontologists in the People's Republic of China in order to gain entry into the circle of Chinese scientists studying the world-famous Chengjiang phosphate-rock fossils that have attracted attention of scientists throughout the world. These fossils were of particular interest to ID proponents because of their promotion of the "Cambrian explosion" as an example of the "abrupt appearance" of animal body plans during this period.¹⁷² The Center for Science and Culture made the Cambrian explosion the centerpiece of an online ID curriculum for children that was available for a time on its website.^{17A}

Having no credentials in paleontology, Chien has never written a peer-reviewed paper on any topic in the field. Moreover, he has no interest in acquiring the credentials that would give him the scientific credibility which the ID movement attributes to him, but describes his interest in the fossils as "a hobby."¹⁷⁴ His anti-evolution efforts stem from his Christian beliefs, and he predicts that "Darwinian theory" will "crumble like the Berlin Wall."¹⁷⁵ In its online ID curriculum, the CSC depicted Chien as an authority on the Cambrian explosion among other "Featured Scientists" such as the well-known paleontologist Stephen Jay Gould.

Dean H. Kenyon: Wedge member and CSC fellow.¹⁷⁶ Kenyon's importance to the ID movement, as already explained, lies in his co-authorship of *Pandas* and his direct connection to the pre-ID creation-science movement. However, he has also been useful to the Wedge as a person whom they can portray as a victim of the scientific establishment, or the "scientific priesthood," in Phillip Johnson's words. Kenyon became the focus of attention in the early 1990s when he was disciplined by the biology department at San Francisco State University for

¹⁷¹ See Chien's Center for Science and Culture biosketch at www.discovery.org/scripts/viewDB/index.php?command=view&id=52&isFellow=true. Accessed on March 17, 2005.

^{17A} See Forrest and Gross, *Creationism's Trojan Horse*, ch. 4.

¹⁷³ See Forrest and Gross, *Creationism's Trojan Horse*, 162-64.

¹⁷⁴ See Cecilia Yau, "The Twilight of Darwinism at the Dawn of a New Millennium: An Interview with Paul Chien," *Challenger*, February-March 2000, at www.ccmusa.org/challenger/Q00203/doc1.html. Accessed on March 27, 2005. See IV. C. 3. at n. 82 and accompanying text for a reference to a 2001 ID paper, "The Cambrian Explosion: Biology's Big Bang," which Chien co-authored with Wedge colleagues Stephen Meyer and Paul Nelson. This paper was not published in a peer-reviewed science journal but first appeared on the website of a student ID group, the Intelligent Design Undergraduate Research Center (IDUEC). See also the Wesley Elsberry reference in note 162.

^{17A} Yau, "The Twilight of Darwinism."

^{17A} See Kenyon's Center for Science and Culture biosketch at www.discovery.org/scripts/viewDB/index.php?command=view&id=89&isFellow=true. Accessed on March 31, 2005.

teaching ID creationism in his introductory biology classes.¹⁷⁷ The core group of individuals who became the Wedge was coalescing at this time, and Kenyon became a symbol of their effort to unseat scientific naturalism. Stephen Meyer invoked "images from the infamous Scopes 'monkey' trial" in a 1994 op-ed about Kenyon.¹⁷⁸ Referring to "experiments (some performed by Mr. Kenyon himself) [that] increasingly contradicted the dominant [evolutionary] view in his field," Meyer portrayed Kenyon as a teacher who was merely trying to inform his students of "important questions about how 'naturalistic' the origin of life really was." Criticizing Kenyon's being told by his department chairman that he could not "report the negative results of research or give students his candid assessment of it," Meyer described Kenyon as "yet another casualty of America's peculiar academic fundamentalism." Yet the experimental data that Kenyon was purportedly producing that would constitute evidence of intelligent design has never been produced for inspection by the scientific community.

G. Creationist tactic of denigrating evolution.

Evolution as "only a theory" and ID as "alternative theory." A notable feature of creationism is its singling out of evolution for special criticism despite the fact that evolutionary theory is at least equal in status to other well-established scientific theories (e.g., cell theory and gravitational theory). ID creationists employ the familiar creationist charge that evolution is not a fact but "only a theory," taking advantage of the popular misunderstanding of a scientific theory as nothing more than an unsupported hunch.¹⁷⁹ This tactic is common to both ID and earlier forms of creationism. Creationists have doubted the facticity of evolutionary theory for decades, as Wayne Frair and P. [Percival] William Davis (Kenyon's *Pandas* co-author) did in 1967: "There seems to be little justification for the popular practice of presenting unrestricted evolution as fact

¹⁷⁷ See an article about Kenyon by Eugenie Scott, director of the National Center for Science Education, "Keep Science Free from Creationism," at www.ncseweb.org/resources/articles/9437_keep_science_free_from_creation_2_24_1994.asp. Accessed on March 17, 2005. Scott, a scientist herself, notes that although Stephen Meyer calls Kenyon a "world-class scientist," he is actually a scientist of "modest accomplishments."

¹⁷⁸ See Stephen C. Meyer, "Danger: Indoctrination: A Scopes Trial for the '90s," *Wall Street Journal* (Eastern edition), December 6, 1993, A14, at www.apologetics.org/articles/scopes.html. Accessed on March 18, 2005. Also available through ProQuest

¹⁷⁹ The National Academy of Sciences answers the question, "Is evolution a fact or a theory?" in *Teaching About Evolution and the Nature of Science* (1998), 56:

The theory of evolution explains how life on earth has changed. In scientific terms, "theory" does not mean "guess" or "hunch" as it does in everyday usage. Scientific theories are explanations of natural phenomena built up logically from testable observations and hypotheses. Biological evolution is the best scientific explanation we have for the enormous range of observations about the living world.

Scientists most often use the word "fact" to describe an observation. But scientists can also use fact to mean something that has been tested or observed so many times that there is no longer a compelling reason to keep testing or looking for examples. The occurrence of evolution in this sense is a fact. Scientists no longer question whether descent with modification occurred because the evidence supporting the idea is so strong.

See this page at http://print.nap.edu/pdf/0309063647/pdf_image/S6.pdf. Accessed on March 28, 2005. See also Scott, "The Nature of Science," *Evolution vs. Creationism*, 237-42.

or law. The so-called fact of evolution cannot be shown to be factual, and therefore should not be presented as such."¹⁸⁰

Kenyon, as a creation scientist in his 1986 affidavit, casts doubt on the facticity of the "macroevolutionary doctrine" by writing that "there are substantial reasons for doubting the truth of this doctrine." His use of the term "doctrine" reflects the creationist charge that evolution is adhered to in the manner of a religious doctrine that is believed without evidence. He sees evolution and creation science as "alternative" theories: "It is not only my professional opinion but that of many leading evolutionist scientists, at present and in the past, that creation-science and evolution are the sole alternative explanations, although each includes a variety of approaches." A few pages later, Kenyon subordinates evolution to creation science: "In short, when all the available evidence is carefully assessed in toto, the evolutionary story of origins appears significantly less probable than the creationist view."¹⁸¹

In 1993, in the "Note to Teachers" at the end of *Pandas*, Mark Hartwig and Stephen Meyer again deny that evolution is a fact:

In sum, then, only in the most trivial sense—change over time—can evolution be considered a fact. Far from being a legitimate reason for avoiding alternative views, the alleged "fact of evolution" underscores precisely why a book like *Pandas* is so necessary. If students are to achieve true scientific literacy, they must learn to distinguish fact from supposition. A curriculum that blurs this distinction serves neither the students nor society.¹⁸²

In 2002, almost forty years after Frair and Davis denied the facticity of evolution, Phillip Johnson dispensed with the "fact or theory" question entirely by asserting that "evolution is basically a hoax."¹⁸³

Gaps in evolution. Creationists charge that there are "gaps" in evolutionary theory. This charge refers both to (1) alleged gaps in the fossil record, i.e., the absence of transitional fossils or "intermediate forms," gaps that supposedly refute the Darwinian idea of common ancestry, and (2) explanatory gaps, i.e., the failure of natural explanations to account for various natural phenomena, which must therefore be explained as the work of an intelligent agent. In his 1986 affidavit, Dean Kenyon refers to gaps of both kinds. He asserts (1) that "the fossil record reflects systematic gaps between categories of organisms" and (2) that "biologic information in ... DNA and RNA" and "new information required for the origin of significantly more complex new

¹⁸⁰ See Davis, *The Case for Creation*, 19.

¹⁸¹ See Kenyon, "Affidavit," 60, 61, 70.

¹⁸² See Hartwig and Meyer, "A Note to Teachers," 157.

¹⁸³ Phillip Johnson, interview by Hank Hanegraaff, *Bible Answer Man* radio program, February 20, 2003. Transcript on file with Barbara Forrest. For an early example of Johnson's questioning of the facticity of evolution see "Evolution as Dogma: The Establishment of Naturalism," *First Things*, October 1990, at www.am.org/docs/johnson/pjdoEmal.htm. Accessed on March 20, 2005.

species, genera, families, etc. cannot originate by naturalistic means."¹⁴ References to such gaps are also found throughout *Pandas*. For example, Davis and Kenyon claim that gaps in the fossil record are evidence for ID and against common ancestry: "This [ID] view proposes that only the long-held expectations of Darwinian theory cause us to refer to the in-between areas [of major groups of plants and animals] as gaps. If this is so, the major different types of living organisms do not have a common ancestry."¹⁵ They also refer to explanatory gaps with respect to "interactive systems" such as blood clotting, which "are virtually impossible to explain in terms of Darwinian evolution."¹⁶

Frair and Davis were making charges about gaps twenty-six years before the 1993 edition of *Pandas*. They attributed gaps in the fossil record to the creation of a "certain limited number of 'kinds' of organisms" as "recorded in the book of Genesis."¹⁷ ID creationists still assert both that there are gaps in the fossil record and that natural explanations for certain natural phenomena are impossible in principle. Dembski charges that problems such as "the absence of transitional forms in the fossil record" and the "origin of the genetic code" are "utterly intractable" for the "mutation-selection mechanism" and for "any other undirected natural process proposed to date."¹⁸

Strategic use of terminology. Attempting to undermine the teaching of evolution and secure admission for their ideas in science classes, creationists have also resorted to techniques such as the strategic use of terminology, claiming, for example, to promote "academic freedom" and "critical thinking," or "critical analysis," which is currently one of ID's preferred terms. In 1974, YEC Henry Morris argued that teaching creationism "stimulates real thinking on the part of the student" and that "teaching evolution exclusively ... is inimical to the principle of academic freedom."¹⁹ In 1983, Richard Bliss argued in an article for the Institute for Creation Research that "evolution should be taught, but only when the strengths and weaknesses are discussed in comparison with the scientific merits of creation."²⁰

¹⁴ See Kenyon, "Affidavit," 64.

¹⁵ See Davis and Kenyon, *Of Pandas and People*, 98.

¹⁶ See Davis and Kenyon, *Of Pandas and People*, 141.

¹⁷ See Frair and Davis, *The Case for Creation*, 31-32.

¹⁸ See William A. Dembski, "Introduction: Mere Creation," in *Science, Faith, and Intelligent Design*, ed. William A. Dembski (Downers Grove, IL: InterVarsity Press, 1998), 22-23.

¹⁹ See Morris, *Scientific Creationism*, 14-15.

²⁰ See Richard Bliss, "Evolutionary Indoctrination and Decision-making in Schools," *Impact*, June 1983, at www.icr.org/pubs/imp/imp-120.htm. Accessed on March 27, 2005.

ID creationists employ the same terminological techniques, as shown in a short excerpt from a legal guidebook for teachers and school officials published by the Foundation for Thought and Ethics (which produced *Pandas*) that uses several of these terms at once:

The aim of the present casebook is ... to *restore academic freedom* in the public school science classroom. *Intelligent Design in Public School Science Curricula: A Legal Guidebook* makes a persuasive case for allowing students to *consider both the strengths and weaknesses of Darwinian theory* as well as those of its chief scientific rival, design theory. *To teach just one view of a controversial subject—and to teach it uncritically—constitutes indoctrination*, not education. This guidebook ... makes a persuasive case for allowing teachers to *teach the controversy*, including the central controversy over whether the design that biologists of all theoretical persuasions encounter in their study of living things is not just apparent but actual.¹⁹¹ (emphasis added)

Such terminology is being used in an attempt to get ID into the science curriculum despite the fact that it has no scientific merit and that there is no genuine controversy over evolution in the scientific community.

H. ID's scientific sterility.

No scientific research. Phase I of the Wedge Strategy was supposed to begin with scientific research that would establish ID's scientific viability: "Phase I is the essential component of everything that comes afterward. Without solid scholarship, research and argument, the [Wedge] project would be just another attempt to indoctrinate instead of persuade."¹⁹² One of the Wedge Strategy's "Five Year Goals" (which was to be accomplished by 2003) is "to see intelligent design theory as an accepted alternative in the sciences and scientific research being done from the perspective of design theory." However, unlike the strategy's other goals such as publication of popular books and getting into public school science classes, all of which have been pursued vigorously, the Wedge's goal of scientific research has not been realized, nor has it been attempted in any meaningful way. There are no peer-reviewed ID articles in which ID is used as a biological theory in mainstream scientific databases such as Medline.¹⁹³ The Wedge Strategy

¹⁹¹ See David K. Dewolf, Stephen C. Meyer, and Mark E. DeForrest, *Intelligent Design in Public School Science Curricula: A Legal Guidebook*, Foundation for Thought and Ethics, 1999, at <http://arn.org/docs/dewolf/guidebook.htm>. See an ID op-ed by Stephen C. Meyer and John Angus Campbell built around the term "teach the controversy" in the *Baltimore Sun* at www.discovery.org/scripts/viewDB/index.php?command=view&id=2456&program=CSC%20-%20OV-news%20and%20News. For a detailed discussion of how ID creationists' terminology has evolved, see Barbara Forrest and Paul R. Gross, "The Evolution of Intelligent Design," December 2004, at www.creationismstrojanhorse.com/STNewsOnline.pdf. A shorter, unreferences version of this article is in the December 2004 *Science and Theology News* at www.stnews.org/archives/2004_december/books_authors_1204.html, Accessed on March 28, 2005.

¹⁹² See the "Five Year Strategic Plan Summary" in "The Wedge Strategy."

¹⁹³ See results of scientific database searches in Forrest and Gross, *Creationism's Trojan Horse*, ch. 3. Although ID creationists claim to have demonstrated ID's scientific viability with publication of two recent articles, their claim does not survive scrutiny. An article by Stephen Meyer in a legitimate science journal, *Proceedings of*

stipulates that research will be carried out by Wedge scientists, naming "Paul Chien et al." and "Douglas Axe et al." as responsible, respectively, for research in paleontology and molecular biology.¹⁹⁴ So far, the only two segments of Phase I to be accomplished successfully are writing and publicity, but the writing is aimed exclusively at the Wedge's popular audience, not the scientific community. The lack of scientific success persists despite the center's lucrative funding of "Research Fellowships" of \$40,000-50,000 per year.¹⁹⁵ As far as original scientific data to support ID is concerned, ID creationists still have nothing. Admissions by Wedge leaders confirm this.

In October 2002, the Wedge held a conference that was closed to everyone except ID supporters. In his keynote address, Dembski noted the cultural inroads the Wedge was making but admitted its lack of scientific progress: "[W]e need to be very clear when we are doing the nuts-and-bolts scientific and conceptual work on ID and when we are engaged in cultural and political activity. What's more, these aspects of ID need to keep pace. We have done amazingly well in creating a cultural movement, but we must not exaggerate ID's successes on the scientific front. It is fine to receive respectful notice from *The New York Times*. . . . [But] [a]n intellectual movement cannot sustain itself on media attention. The scientific and conceptual work on ID occurs out of the limelight, requires intense concentration over extended periods, and is fully appreciated only by relatively few specialists. The cultural renewal work on ID, by contrast, occurs in the limelight, offers quick closure and gratification, and makes its appeal to the population at large. Because of ID's outstanding success at gaining a cultural hearing, the scientific research part of ID is now lagging behind."¹⁹⁶ Dembski called for the development of a curriculum and the writing of "basal" college and high school textbooks, saying that "the closest thing we have right now is a supplemental biology text (*Of Pandas and People*)."

the Biological Society of Washington, is a review essay that presents no original ID research. After the article's publication, the BSW Council explained that proper review procedures had not been followed and vowed to henceforth adhere to these procedures. See Stephen C. Meyer, "The Origin of Biological Information and the Higher Taxonomic Categories," *Proceedings of the Biological Society of Washington* 117 (2004): 231-239, at www.discovery.org/scripts/viewDB/index.php?comin&v=iew&id=2177&program^CSC%20-%20Scientific%20Research%20and%20ScholarsMp%20-%20Science. See also National Center for Science Education, "BSW Repudiates Meyer," September 7, 2004, at www.ncseweb.org/resources/news/2004/ZZ/608_bsw_repudiates_meyer_9_7_2004.asp. An article in *Protein Science* by Wedge biochemist Michael Behe and David W. Snoke was critiqued by qualified scientists who pointed out that "it contains no 'design theory,' makes no attempt to model an 'intelligent design' process, and proposes no alternative to evolution." See Ian F. Musgrave, Steve Reuland, and Reed Cartwright, "Theory Is as Theory Does," *Panda's Thumb* weblog, October 11, 2004, at www.pandas-thumb.org/pt-archives/00Q480.html. Accessed on March 20, 2005.

¹⁹⁴ As stated above, Paul Chien, a marine biologist, has no scientific credentials in paleontology. Douglas Axe is a molecular biologist but has produced no research that would support ID as a scientific theory. See Forrest and Gross, *Creationism's Trojan*, ch. 3 and 4.

¹⁹⁵ See "Information About Center Fellows and the Research Fellowship Program" at www.discovery.org/csc/fellowshipinfo.php. Accessed on March 15, 2005.

¹⁹⁶ See Dembski, "Becoming a Disciplined Science."

Yet ID's complete lack of scientific success has not prevented Dembski from calling for the teaching of ID in American public school science classes even without any research, in a public disagreement in 2002 with a pseudonymous ID supporter who calls himself "Mike Gene." Dembski stated, "Mike . . . takes the 'high road' that ID must first be developed further as a scientific and scholarly program before it may be legitimately taught in public school science curricula. . . . But I've come to reject this view entirely."¹⁹⁷ Moreover, he calls for the recruitment of young people not only to do the research that Wedge scientists have not done but to develop an ID research program: "Why should ID supporters allow the Darwinian establishment to indoctrinate students at the high school level, only to divert some of the brightest to becoming supporters of a mechanistic account of evolution, when by presenting ID at the high school level some of these same students would go on to careers trying to develop ID as a positive research program? If ID is going to succeed as a research program, it will need workers, and these are best recruited at a young age." Dembski, however, has this process backwards. His desire to get ID into the public school science curriculum before ID scientists have produced any scientific data to support it reverses the order in which science makes its way into the instructional process and subsequently into the minds of children. Responsible pedagogical practice requires that children be taught only science that has been through the proper procedures of testing and peer-review *before* it is introduced into the classroom. Bypassing these procedures, as Dembski proposes, would eliminate all constraints on what unsuspecting children could be taught.¹⁹⁸

The irony of Wedge leaders' admission of failure extends further. On August 4, 2004, an article by Stephen Meyer was published in the *Proceedings of the Biological Society of Washington*, a peer-reviewed science journal. The article was a review essay that offered the standard ID criticisms of evolution and presented no original scientific data to support ID. Its publication subsequently aroused a good deal of controversy because of a lapse in proper review procedures on the part of the person who was editor at the time. Yet, consonant with the Wedge Strategy plan to construe ID as a scientific theory, the article was clearly intended to serve as evidence of

¹⁹⁷ See William A. Dembski, "Then and Only Then: A Response to Mike Gene," July 2002, at www.designinference.com/documents/2002.07.Mike.JGene.htm. Accessed on March 20, 2005.

¹⁹⁸ Case Western Reserve University physicist Lawrence Krauss, who has opposed the teaching of ID in Ohio, addressed the question of when to introduce scientific concepts to students. His comments are also relevant to the Wedge's urging that teachers be allowed to "teach the controversy":

"The idea of teaching about a controversy may sound good, but it's disingenuous because there is no scientific controversy," Krauss said. "They [ID proponents] use language that sounds sensible. 'We just want fairness,' they'll say. 'We just want an equal playing field for our ideas.' The point is they already have an equal playing field: the field of science. They can submit their ideas to journals, and get peer reviewed, and if their ideas are any good they'll make it into the scientific canon, and make it down into the high schools. What they want is something completely unfair, to bypass the whole process and go directly to the high school students."

See Steve Benen, "Insidious Design," *Church and State*, May 2002, at www.au.org/site/News2?abbr=cs&page=NewsArticle&id=1581&security=1001&news_iv_ctr=1075. Accessed on March 28, 2005.

ID's acceptance into the scientific mainstream.¹⁹⁹ At virtually the same time, in the July/August 2004 issue of *Touchstone*, Wedge member Paul Nelson made yet another admission of ID's scientific failure: "Science in the Key of Design, if you will, is a melody that we're going to have to teach others to hear and play. *First, of course, we have to master it ourselves!* ... Easily the biggest challenge facing the ID community is to develop a full-fledged theory of biological design. *We don't have such a theory right now, and that's a problem. Without a theory, it's very hard to know where to direct your research focus.* Right now, we've got a *bag of powerful intuitions*, and a *handful of notions such as 'irreducible complexity' and 'specified complexity'*—but, as yet, *no general theory of biological design.*"²⁰⁰ (emphasis added) What Nelson labels here as a "handful of notions," irreducible complexity and specified complexity, are the two most important concepts in the ID corpus.

No intentions to follow standard procedure for scientific peer review. Wedge biochemist Michael Behe, from whom one would most reasonably expect some original scientific data to support ID if such data were to be had, so far shows no intent to produce it. As a member of the American Society for Biochemistry and Molecular Biology, Behe has the right to make a presentation on any subject of his choice at the society's annual meetings. Kenneth Miller, an evolutionary biologist at Brown University who has published scientific criticisms of Behe's concept of irreducible complexity, has commented on Behe's refusal to avail himself of this opportunity: "If I thought I had an idea that would completely revolutionize cell biology in the same way that Professor Behe thinks he has an idea that would revolutionize biochemistry ... I would be talking about that idea at every single meeting of my peers I could possibly get to." Behe, however, declines: "I just don't think that large scientific meetings are effective forums for presenting these ideas."²⁰¹ Yet he has made numerous presentations in churches.²⁰²

Dembski, one of the most prolific of the Wedge writers, prefers more lucrative publishing venues to the non-remunerative publication of scholarly articles in peer-reviewed academic journals: "I've just gotten kind of blasé about submitting things to journals where you often wait two years to get things into print... And I find I can actually get the turnaround faster by writing a book

¹⁹⁹ See note 193 above. See also the Discovery Institute's "Media Backgrounder" issued in response to the controversy surrounding Meyer's article at www.discovery.org/scripts/viewDB/index.php?command=view.&program=CSC-News&id=2190&callingPage=discoMainPage. See also National Center for Science Education, "ID in the Spotlight?" August 27, 2004, at www.ncseweb.org/resources/news/2004/ZZ/463_id_injhs_spotlight_8_27_2004.asp.

²⁰⁰ See "Interview: The Measure of Design," 64-65.

²⁰¹ See Beth McMurtrie, "Darwinism Under Attack," *Chronicle of Higher Education*, December 21, 2001, at <http://chronicle.com/free/v48/i17/17a00801.htm>. Accessed on March 20, 2005.

²⁰² An example is Behe's participation in a conference entitled "Intelligent Design Conference: Dispelling the Myth of Darwinism," at the Community Bible Church in Highlands, North Carolina, in June 2004. See the conference website and roster of speakers at www.idconference.org/index.html. Accessed on March 28, 2005.

04/28/2005 23:54 9855432812

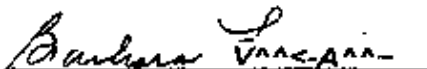
HISTORY

PAGE 02

49

and getting the ideas expressed there. My books sell well. I get a royalty. And the material gets read more.²⁰³

At present, thirteen years into the execution of the Wedge Strategy, ID creationists—by their own admission—are no closer to having original scientific data to support ID than when they began the strategy's formal execution in 1992. This astonishing fact raises the important question of how *Of Pandas and People*, an ID book first published in 1989 and reprinted in 1993, can be considered a science textbook to be used by a public high school.



Barbara Forrest, Ph.D.
Southeastern Louisiana University
April 1, 2005

²⁰³ s. McMurtree, "Darwinism Under Attack."